

AMERICAN JOURNAL OF EDUCATION

6905 No. 8
10-63 waiting
Education

LIBRARY
APR 14 1887
Bureau of Education

Universal Education—The Safety of a Republic.

VOL. XVIII.

ST. LOUIS, JANUARY 9, 1885

No. 1.

Eclectic Educational Series. ANNOUNCEMENTS:

	Sample Copy and Introduction Price.
Murdoch's Analytic Elocution, (1).....	\$1.00
Eclectic Complete Book-keeping, (2).....	.50
Norton's Chemistry—Complete, (3).....	1.10
White's Oral Lessons in Number, (4).....	.60
Eclectic School Geometry, (5).....	.60
Ray's New Astronomy, (6).....	1.20

(1) NOW READY. ANALYTIC ELOCUTION, by the well-known veteran Actor, Reader and Instructor in Elocution, JAMES E. MURDOCH, author of "A Plea for Spoken Language." A complete and practical exposition of the only true and scientific method of developing the speaking voice. Fully illustrated by numerous extracts from the best sources, to which are added seventy pages of selected readings. 12mo, cloth, half roan, 304 pages.

(2) NOW READY. ECLECTIC COMPLETE BOOK-KEEPING. By IRA MATHEW. The cheapest and most practical work yet offered on this subject. Its methods have been tested by twenty-five years' experience. Double Entry is clearly elucidated. Many new and valuable special forms suggested. 150 pages, half roan. Key and Blanks also nearly ready.

(3) NOW READY. Elements of Chemistry, completed by the addition of chapters on Organic Chemistry. Half roan, 324 pages, 12mo.

(4) READY DECEMBER 15. ORAL LESSONS IN NUMBER. For Teachers. By E. E. WHITE, A. M. This work is not simply a Manual for Teachers, but an exhaustive treatise containing the Exercises to be used by the Teacher in the instruction of primary classes in number. It is a complete and practical Guide, indispensable to every teacher of Arithmetic.

(5) READY JANUARY 1. ECLECTIC SCHOOL GEOMETRY. A revision of Evan's School Geometry, by J. J. BURNS, A. M., Superintendent of Schools, Dayton, O.; formerly Ohio State School Commissioner. In this revision the work is made to conform to the "New Geometry," and is especially adapted to High Schools by the addition of numerous exercises and original demonstrations. 12mo, half roan, 155 pages.

(6) READY JANUARY 1, 1885. RAY'S ASTRONOMY, revised by the author, S. H. PRABODY, Regent of University of Illinois, and adapted to the progress of astronomical science. All recent established discoveries are included, especially those relating to solar and planetary physics. 12mo, half roan, about 150 pages.

VAN ANTWERP, BRAGG & CO., Publishers, Cincinnati and New York.

PADS AND TABLETS.

Favorite Blotter Tablet

ONLY TEN CENTS EACH.

For a NEAT TABLET of Paper with a Sheet of Blotter attached, in Commercial, Packet, Letter, Legal, Bill or Fools Cap Size.

"Ye Knickerbocker" Blotter Tablets, Cheapest and Best—for Educational Use.

Student's Note Books, Drawing Tablets, Quincy Practice Paper, Spelling Blanks, and the Perfect Pencil Tablet. 5,000,000 used in two years. For sale by all dealers.

Acme Stationery and Paper Co.,

SOLE MANUFACTURERS, New York.

Beware of Imitations.

17h-18a

ESTERBROOK'S STEEL PENS

Are especially recommended to Principals and Teachers, on account of their Uniformly Superior Quality and Moderate Price. All the Stationers have them.

Leading School Numbers: 333, 444, 135, 048. All of genuine American Manufacture.

THE ESTERBROOK STEEL PEN CO.,

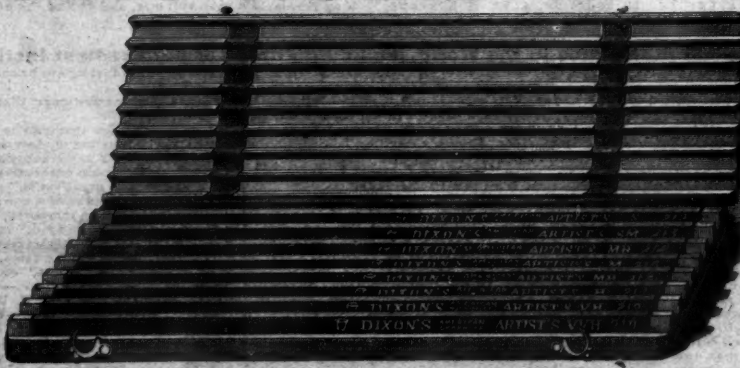
Works: Camden, N. J.

26 John St., NEW YORK.

AN ELEGANT HOLIDAY PRESENT.

DIXON'S
American Graphite
Artists' Pencils

IN
REA AROMATIC CEDAR CASES,
HIGHLY POLISHED.
Assorted Grades of Leads,
Complete for Art Work.
Useful, Beautiful, Appropriate.



Trade Number.
205, Case of 4 Artists' Pencils,
1 each of
MB, MH, H, and VH, \$0.75
206, Case of 6 Artists' Pencils,
1 each of
S, SM, MB, M, MH, H, \$1.15
207, Case of 8 Artists' Pencils,
1 each of
S, SM, MB, M, MH, H,
VH, VVH, \$1.50

If your Stationer does not keep them, write to

JOS. DIXON CRUCIBLE CO., JERSEY CITY, N. J.

"The Best."

HARPER'S

Standard Educational Series.

A NOTABLE GROUP!

Harper's Graded Arithmetics.

TWO BOOKS!

Recently published. This series is based on common-sense methods, growing out of actual school room experience. Adopted June 7, 1894, for EXCLUSIVE use in all the schools of the STATE OF DELAWARE.

Harrington's Graded Spelling-Book.

Although but recently issued, this little book has attained unprecedented popularity. Adopted within the last few weeks in Indianapolis, Ind., Fall River, Mass., Somerville, Mass., Quincy, Mass., etc., etc.

Harper's Geographies.

Complete Course in Physical Commercial and Political Geography in two books. Just adopted for use in the cities of Philadelphia, Pa., Camden, N. J., Newburyport, Mass., Newton, Mass., etc., etc.

Swinton's New Language Series.

This system of language training has been more extensively introduced throughout the United States than all other systems combined. It has recently been adopted for exclusive use in Washington Territory, San Bernardino City and County, Cal., Altoona, Pa., etc., etc.

For Circulars, Sample Copies, etc., address

W. J. BUTTON, AGENT,

For HARPER & BROTHERS EDUCATIONAL WORKS,

379 Wabash Avenue, Chicago, Ill.

"Standard."

OUT OUT AND FORWARD THIS

Order for Sweet's Methods of Teaching.

"SWEET'S METHODS OF TEACHING.—Every Teacher may derive immediate practical benefit from its perusal."—F. Louis SUDAN, Prin. St. Louis Normal School, and President of the National Teachers' Association.

W. J. Button, Agt., Harper & Bros., 379 Wabash Ave., Chicago, Ill.

DEAR SIR: Enclosed find \$1, for which please send SWEET'S METHODS OF TEACHING, by mail, to the following address:

JUST OUT! SOMETHING NEW!

Grammar and Analysis

Made Easy and Attractive

—BY—

DIAGRAMS!

THE MOST COMPLETE WORK ON GRAMMATICAL DIAGRAM YET PUBLISHED.

It contains all the difficult sentences of Harvey's Grammar (both old and new editions) selected on account of the variety of construction; also difficult sentences from other grammars and Greene's Analysis, closing with several pages of miscellaneous sentences, verbal analysis and parsing. It makes the study of grammar the *delight* of both teacher and pupils. Price, \$1.25. Sent postpaid to any address on receipt of price. Address the author, 18-1-2-3, V. IRISH, LIMA, O.

Dont B Fool

I send one book on the Art of Money Getting.
R. L. WOLCOTT, Brooklyn, N. Y.

HOPE FOR THE DEAF.

NICHOLSON'S Improved Artificial EAR DRUMS. The only, sure, easy and unseen device used to permanently restore hearing. Recommended by scientific men of Europe and America. Write for free illustrated descriptive book to J. H. NICHOLSON, 7 Murray St. New York. 17c-18b

The Biggest Thing Out Illustrated Book
(new) E. NASON & CO., 130 Fulton St., N. Y. Sent Free. 17-11-18-4

GEOLOGICAL CABINETS.

The only way to become acquainted with nature is to study nature herself. To meet the increasing demand for natural objects to illustrate Geology, I make, for a short time, the following unequalled offer:

100 FINE SPECIMENS FOR \$12.00.
Each set will comprise SIXTY MINERALS and ROCKS, 2 1/2 x 1 1/4 inches in average size mentioned in the best text books, and FORTY FOSSILS, representing the principal Geological Horizons and forms of ancient life, from lowest to highest.

IN CLUBS:
5 sets to one address, \$11 each.
10 " " " 22 " each.
Every cabinet will be selected by an Eastern University Graduate, a pupil of Agassiz, and a teacher by the *object method* of many years experience. All will be correctly labelled, carefully packed, and forwarded at the purchaser's expense and risk. Terms cash. Lists, references, etc., sent on application. A full line of **NATURAL HISTORY SUPPLIES.**
S. H. TROWBRIDGE, Glasgow, Mo.

Willard's Hotel,

WASHINGTON, D. C.

This old-established and chosen rendezvous and favorite abiding place of the most famous men and women of America has, under the present management, been thoroughly renovated at an expense of over \$100,000, and is now pronounced as the model Hotel in regard to luxurious apartments, cuisine, service, and system for heating and ventilation.

The "WILLARD" is located within a stone's-throw of the Executive Mansion, Treasury, War, Navy and State Departments, the Department of Justice, Corcoran Art Gallery, and other numerous points of interest, and can justly be called the most convenient Hotel for tourists and other travelers in Washington City.

O. G. STAPLES, Proprietor,
Formerly of The Thousand Island House.

JOHNSON'S New Universal Cyclopædia—"The Best"—Planned by Hon. Horace Greeley, LL.D.

PRES'T F. A. P. BARNARD, LL. D., Columbia College, N. Y. }
PROF. ARNOLD H. GUYOT, LL. D., College of New Jersey. }

Editors in Chief. { Who wrote and signed more than 150 of the 8,000 great special articles, besides supervising the whole work.

It has 31 Departments with an editor of the highest scholarly standing for each, viz.: "Public Law," etc., by Pres't T. D. WOOLSEY, LL. D.; "Civil Law," etc., by Prof. T. W. DWIGHT, LL. D.; "American History," etc., by Hon. HORACE GREELEY, LL. D., and Hon. ALEX. H. STEVENS, LL. D.; "Botany," etc., by Prof. ASA GRAY, LL. D.; "Medicine," etc., by Prof. WILLARD PARKER, M.D., LL.D., etc., etc.

It has 3,000 eminent contributors from all parts of America and Europe, whose names are signed to their article. It is "THE BEST," and the only original American Cyclopædia. It contains more than Appleton's in 16 volumes, and at half the price. Don't fail to examine JOHNSON'S before purchasing any other.

Testimonials from the Highest Authorities in the World, including Fifteen of our Greatest Institutions of Learning, viz.:

Harvard University,

Yale,

Brown Univrsity,

Dartmouth,

Williams,

Cornell Univ'y,

Amherst,

Hamilton,

Rochester Univ.,

Richmond, &c.,

"I expect to be grateful the rest of my days for the use of it," etc.—Prof. F. J. Child, LL. D.
"Convenient, comprehensive, compact and correct," etc.—Hon. R. C. Winthrop, LL. D.
"Good authority for the next half century," etc.—Hon. Chas. Francis Adams, LL. D.
"I add my testimonial to its great excellence," etc.—Pres. S. C. Brown, LL. D.
"It is a valuable mine of information," etc.—Hon. Roscoe Conkling, LL. D.
"A vast amount of useful matter," etc.—Pres. Samuel G. Bartlett, LL. D.
"Calculated to serve an excellent purpose," etc.—Pres. A. D. White, LL. D.
"Superior to any work of the kind," etc.—Rev. Wm. M. Taylor, D.D.
"A thesaurus of useful knowledge," etc.—Pres. Alexis Caldwell, LL. D.
"After the Bible the most indispensable," etc.—Pres. W. S. Clark, LL. D.
"A vast amount of useful knowledge," etc.—Pres. Noah Porter, LL. D.
"Not equalled by any other," etc.—Hon. Joseph F. Bradley, LL. D.
"An honor to the country," etc.—Rt. Rev. Horatio Potter, LL. D.
"By far the best," etc.—Hon. Alexander H. Stevens, LL. D.
"The best we have," etc.—Hon. Wendell Phillips, LL. D.
"The encomiums are just," etc.—Prof. Ezra Abbott, LL. D.
"It is a peerless work," etc.—Pres. J. H. Seelye, LL. D.
"It is rich," etc.—Prof. Benjamin Stilleman, LL. D.
"It is a work which is found in the library of Congress, to answer more questions satisfactorily than any other work of reference," etc.—Hon. A. R. Spofford, LL. D., Librarian of Congress.

"The amount of valuable information is wonderful," etc.—Rt. Hon. W. E. Gladstone, LL. D.
"More accurate knowledge than an ordinary library," etc.—Pres. M. B. Anderson, LL. D.
"More information than can be found in any other," etc.—Pres. T. D. Woolsey, LL. D.
"A worthy monument of American scholarship," etc.—Pres. Howard Crosby, LL. D.
"The best in the English language for general use," etc.—Prof. T. W. Dwight, LL. D.
"Lucid, able and comprehensive," etc.—Hon. Wm. Lloyd Garrison, LL. D.
"A possession of great value," etc.—Hon. Thomas Wentworth Higginson.
"A trustworthy source of knowledge," etc.—Prof. Joseph Henry, LL. D.
"A standard book of reference," etc.—Pres. F. A. Chadbourne, LL. D.
"The best work of the kind," etc.—Chancellor George Woods, LL. D.
"A collection of very high value," etc.—Prof. W. D. Whitney, LL. D.
"Extremely useful to all classes," etc.—Hon. Charles O'Connor, LL. D.
"It is superior to all others," etc.—Prof. E. G. Robinson, LL. D.
"Nothing superior to it," etc.—John G. Whittier, the Poet.
"Very complete," etc.—M. E. White, LL. D., Chief Justice.
"Better than any other," etc.—Pres. W. A. Stearns, LL. D.
"Will supply a want long felt," etc.—U. S. Grant, LL. D.
"It is invaluable," etc.—Pres. J. L. M. Curry, LL. D.
"Every teacher needs such a work, and I should like to see it in every household," etc.—Hon. John D. Philbrick, LL. D., late Sept. of Boston Public Schools.

For particulars to obtain or sell it, &c., address

We are constantly exchanging Appleton's and Scribner's Britannica even, for Johnson's, and sell same and Peoples' at panic prices.

17-7-18-4

A. J. JOHNSON & CO., Publishers, 11 Great Jones Street, New York.
M. T. BROWN, 1708 Grand Avenue, Davenport, Iowa.

TEACHERS WANTED IN EVERY COUNTY.

AMERICAN JOURNAL OF EDUCATION

Universal Education—The Safety of a Republic.

VOL. XVIII.

ST. LOUIS, JANUARY 9, 1885.

No. 1.

Printed for the Editors, by FERRIN & SMITH, and "Entered at the postoffice at St. Louis, Mo., and admitted for transmission through the mails at second-class rates."

Mr. J. H. BATES, Newspaper Advertising Agent, 41 Park Row (Times Building), New York, is authorized to contract for advertisements in all the editions of the AMERICAN JOURNAL OF EDUCATION at our best rates.

TABLE OF CONTENTS.

Miscellaneous Editorials.....	3
How Would This Do?.....	3
The Distribution.....	4
Twenty States.....	4
The People Ahead.....	4
Value Received.....	4
Loss and Gain.....	4
Ahem!.....	4
Half-Time Schools.....	5
Arkansas.....	6
More Facts.....	6
Can They Do This?.....	6
All True.....	6
Half-Time Schools Concluded.....	6
Solid and Fluid.....	7
Tennessee.....	8
Don't Keep It.....	8
A Cry from Macedonia.....	8
A Fine Method.....	8
Colorado.....	9
How to Use Globes.....	9
Nebraska.....	9
Pennsylvania.....	9
Illinois.....	10
Spelling by Sound.....	10
A Suggestion.....	10
Kentucky.....	11
On the Right Track.....	11
Recent Literature.....	12
The Light That Is Felt.....	13
The Young Citizens.....	14
The Money Is Needed.....	14
Something More.....	14
Map Drawing.....	15
Fast Time to Washington.....	15
To the World's Fair.....	15
The Conquest of the Moors.....	15

WHY not write to your member of Congress at once, and ask him to vote for the appropriation of \$77,000,000, to help do away with the loss from illiteracy.

THE principal colleges of the United States that had graduates in the last Congress were, Union, 5; Yale, 6; Harvard, 14; West Point, 4; Princeton, 5; Hamilton, 3; Dartmouth, 8; Williams, 3; Amherst, 2; Brown University, 4; Rutgers of N. J., 1; Virginia University, 12; Dickerson of Penn., 6. Total 14 Senators and 54 Representatives.



St. Louis, January 9, 1885.

J. B. MERWIN.....Managing Editor.
HON. R. D. SHANNON,
PROF. J. BALDWIN
PROF. G. L. OSBORNE,
PROF. R. C. NORTON, } Associate Editors.

Terms, per year.....\$1.00
Single copy.....10

On page 4, you find just what your State will get if the Senate bill appropriating \$77,000,000 passes the House of Representatives—as it ought to, early.

THE members of the House of Representatives would pass the Senate bill appropriating \$77,000,000 for education if our three hundred thousand teachers write them, asking them to vote for this measure without delay.

MORE than 500 teachers availed themselves of the very low rates given by the Illinois Central and the Cairo Short Line railroads to visit the World's Exposition at New Orleans during the Christmas holidays. The reports brought back of the extent and magnificence of the exhibition are of such a nature as will send thousands of others to the Crescent city before its close.

THE teachers of the country should set the members of the House of Representatives in Washington all aflame with short, pithy, stirring letters, asking for the passage of the Senate bill appropriating \$77,000,000 for educational purposes.

WE can furnish at once all the facts and data necessary to convince any unprejudiced mind as to the necessity of national aid to education, and as to the constitutionality of this important measure also.

TEXAS sent a splendid and influential delegation of her teachers over the "Sunset Route," to the World's Fair in New Orleans during the holidays.

HOW WOULD THIS DO?

IF our three hundred thousand teachers were to each write to the members of the House of Representatives a letter something like the following, it would almost surely result in the passage of the Senate bill appropriating \$77,000,000 for educational purposes:

—, —, 1885.

"HON. JOHN SMITH, M. C., Washington, D. C.:

My Dear Sir: In view of the pressing necessity for more money for educational purposes, and especially in view of the fact of a yearly loss from illiteracy of about \$210,000,000 of money, we hope you will find it consistent with your duty not only to vote for the Senate bill appropriating \$77,000,000 for education, but to urge this duty upon others also. Our State will secure about (see page 4), if the bill passes.

Very truly yours,

—, —, —."

Suppose three hundred thousand letters of like or similar import were poured into the House of Representatives within the next thirty days, and the passage of the bill secured, would any teacher or any other person ever have cause to regret this slight effort? We think not. It ought to be done—without delay.

THE loss by illiteracy, and the gain by intelligence, is set forth clearly on page 4 of this issue.

IF every teacher, as thousands have already done—and will continue to do—calls the attention of his friends outside the profession, to the great and special value of the Premium we send—post-paid—to every subscriber of this Journal, he will find, that giving, in this case, certainly "doth not impoverish, or withholding make rich." We want ten to get it, where one receives it now. Every teacher can help on the good work.

WE only ask for \$77,000,000 to counteract the awful loss from illiteracy of \$210,000,000.

ONE of the leading educators of Arkansas writes, under date of Dec. 20: "Our delegation in Congress is solid for the \$77,000,000 for schools. They are both wise and patriotic. Arkansas needs the \$2,492,830.10 to establish normal schools, and to increase the school term to nine months. If the other educational journals had done a tenth part as much as the American Journal of Education has done to enlighten the people on the necessity existing for the passage of this bill, we should have had it passed long ago. T. C."

WITHOUT earnestness no man is ever great or does really great things. He may be the cleverest of men; he may be brilliant, entertaining, popular; but he will want weight. No soul-moving picture was ever painted that had not its depth of shadow.

WOULD it not be well for the two Senators from Missouri to remember the awful fact so plainly stated by Governor Crittenden, that "Paralimony towards education is liberality towards crime." Missouri needs the \$2,575,978 she would get if the House pass the Senate bill. It seems to us the 10,000 teachers in Missouri should strongly and without delay endorse the action of the Senate by sending petitions with thousands of signatures to the fourteen Representatives the State has in Congress, asking for the passage of this bill.

NEW MEXICO has adopted a new school law. It requires a tax of three mills on the dollar to support public schools for teaching common branches of knowledge; and to maintain a superintendent in each county.

THE loss by illiteracy in this country every year is \$210,000,000 (see page 4 of this issue).

A special investigation was made in fifteen states, of the inmates, to the number of 7,398, of almshouses and infirmaries. Of these, 4,327, or nearly 59 per cent. could not read and write. Ignorance costs. Education pays.

THE DISTRIBUTION.

We present below the figures as to the amount of money each State will get if the House passes the Senate bill, appropriating \$77,000,000, on the basis of illiteracy for educational purposes. There were 6,239,958 persons above the age of 10 years in the country in the year 1880 unable to write. This would distribute the \$77,000,000 as follows:

Alabama.....	\$5,385,60.86	Missouri.....	\$3,575,538.18
Arizona.....	7,180.25	Nebraska.....	14,253.50
Arkansas.....	4,222,80.10	Nevada.....	32,400.78
California.....	159,316.97	N. Hampshire.....	176,184.21
Colorado.....	129,217.34	New Jersey.....	675,83.35
Connecticut.....	350,747.24	New Mexico.....	705,205.13
Dakota.....	50,400.27	New York.....	2,709,815.89
Delaware.....	339,565.40	N. Carolina.....	5,725,371.04
Dist. of Col'a.....	3,800.00	Ohio.....	1,626,900.11
Florida.....	560,414.30	Oregon.....	91,596.50
Georgia.....	6,121,441.2	Pennsylvania.....	3,815,531.28
Illinois.....	1,266,173.77	Rhode Island.....	305,911.33
Indiana.....	1,767,771.50	S. Carolina.....	4,591,826.61
Iowa.....	574,146.05	Tennessee.....	5,608,238.25
Kansas.....	487,127.03	Texas.....	3,906,027.28
Kentucky.....	4,209,091.87	Utah.....	108,011.26
Louisiana.....	3,928,753.98	Vermont.....	195,435.84
Maine.....	273,571.92	Virginia.....	5,310,169.06
Maryland.....	1,650,558.59	Wash. Ter.....	47,690.55
Massachusetts.....	1,473,557.05	W. Virginia.....	1,063,525.01
Michigan.....	786,130.78	Wisconsin.....	685,576.04
Minnesota.....	1,302,991.71	Wyoming.....	6,860.93
Mississippi.....	4,605,137.63		
Montana.....	21,664.04	Total.....	\$77,000,000.00

The bill passed the Senate April 7th, 1884, by the following vote: yeas, 33; nays, 11.

The prospects are good for the passage of the bill by the House of Representatives, if the teachers—everywhere—will pour in the petitions. What a grand recognition of the work our teachers are doing, the passage of this bill would be. What a grand uplift it would give to the whole public school system. Let us have it passed.

TWENTY STATES.

"NATIONAL AID" to help establish and maintain a school system in all the states nine months during the year is a necessity. This necessity is based upon the fact that a careful examination of the statistics of twenty States shows the following average results:

First. That one-sixth of all the crime in the country is committed by persons wholly illiterate.

Second. That one-third of the crime in the country is committed by persons wholly or substantially illiterate.

Third. That the proportion of criminals among the illiterate class is, on the average, ten times as great as it is among those who have been instructed in the elements of a common-school education or beyond.

Fourth. That the expense imposed upon society to protect itself against a few thousand criminals, most of whom were made such through the neglect of society to take care of their education when young, is one of the heaviest of the public burdens. In the city of New York it is 50 per cent. more than the whole cost of the public schools. As a logical consequence of this neglect of education, the city jails and almshouses are crammed and taxes are high.

The city in its meager provision for education, and its enormous taxation for criminals (to use an old but ex-

pressive adage), "saves at the spigot, but loses at the bung."

What is true of the metropolis of the country, is equally true of every city, town, village, and neighborhood. These facts could be multiplied almost without limit.

The examination of the statistics of criminality and illiteracy in the census of any civilized state or country will give results substantially in harmony with the above.

Ignorance costs. Education pays.

If you looked over the table of contents carefully when you received our Premium, you see at once what a valuable aid and collateral it will be to you in all your future work in the school-room, and out of it. It is as good for your friends as for you. Please call their attention to it also, so that they may secure it now while we can send it so cheaply.

BETTER methods—better wages—better terms, because longer and better results, are the especial points we propose to urge in every issue of this Journal, so that it shall do vastly more for its subscribers and friends this year than ever before.

THE PEOPLE AHEAD.

A SPECIAL to the St. Louis Post-Dispatch, of late date, says the friends of the Educational bill, which grants some seventy-seven millions of dollars to aid the common schools of the country, are much encouraged by the developments since the return of Congress. "I find," said Rep. Willis, talking of its prospects of passage, "that the bill is much stronger than it was last session. The fact is, that the people are ahead of the members of Congress in this matter."

"The members as they come back tell me that they heard from the failure to pass this bill everywhere."

"This is especially true of the South. They say that the people are talking of it, and demanding its passage there. There are many who were unwilling to vote for it last session who will readily do so this time."

"Do you expect it to pass, then?"

"Yes. I think there will be little opposition to it."

"Will there be much discussion on it?"

"I think not. There is not the time to spare for talk about a measure on which so nearly all are united, as is the case with this. I expect to see the bill a law before the end of the session."

"In the form that it passed the Senate last session?"

"Practically so. I should like to see one or two changes. In the form that it now stands the sum to be distributed in the third year would give more to some of the States than they raised and distributed by taxation for this purpose in the last year, and as this is prohibited by the bill it would

result in making the distribution somewhat unequal, while if the total for that year is slightly reduced, it will obviate this difficulty."

Send on the petitions!

VALUE RECEIVED.

Our teachers give value received, many times over, for the expense incurred in maintaining the schools. Why not call attention to such well established facts as these in the discussion of these questions. In Pennsylvania, Ohio, and Illinois, three great central States, where self-support is not difficult, one in ten of the illiterates is a pauper, while of the rest of the population only one in three hundred is a pauper. In other words, in those three great central States a given number of children suffered to grow up in ignorance, produce thirty times as many paupers as when given an average common school education.

Let us rebuild the Southern Normal school at Carbondale, Ill.. Let us increase both the wages of the teachers, and the length of the school term in Pennsylvania. Let us spend less for whisky in Ohio, and more for schools! Ignorance costs. Education pays.

THE record this Journal has made during the seventeen years of its existence, is aiding the teachers in their work, and the public in better appreciating it, is one of which we feel rather proud.

LOSS AND GAIN.

DO THE teachers understand fully the value of the service they render the State? Do the school officers understand the value of these services? Do the tax payers understand the real and permanent value of teachers' work in these school districts?

Let us look into this matter a little. From a series of questions sent out by the United States Commissioner of Education, and the answers given, Col. Dexter A. Hawkins, who is an authority on this subject above question, tabulated the results so that the following facts were clearly established—facts which we hope teachers and school officers will use with members of the Legislature when the question of more liberal appropriations come up for discussion this winter.

1. That an average free common-school education, such as is provided in all the States where the free common-school has become a permanent institution, adds 50 per cent. to the productive power of the laborer considered as a mere productive machine.

2. That the average academical education adds 100 per cent.

3. That the average collegiate or university education adds from 200 to 300 per cent. to his average annual productive capacity, to say nothing of

the vast increase to his manliness—to his godlikeness.

By the census of 1880 we had in the United States 4,204,362 illiterate adults—white and colored. A very low estimate.

Now, putting their labor at the minimum annual value of \$100 each (which is far below the average even for farm labor, while the wages of manufacturing operatives, including 15 per cent. of women and children, as shown by the census of 1880, average in the whole country \$445 each per year,) and the annual loss of these persons from the lack of at least a common-school education would be \$50 each. This, for the whole number of 4,204,362, is \$210,000,000 per year—a sum twice as large as the entire annual expenditure for public education in the whole country. This sum—\$210,000,000—is a clear annual loss, not only to these illiterates, but to the community, by reason of their illiteracy.

Ignorance costs! Education pays.

Give us the money to employ more competent teachers, and to continue the schools nine months of the year, and we will put in a class of men and women who will be competent to devise the best methods for doing the most practical work within a given time. We cannot work without "tools to work with," as well as material to work upon. Ignorance costs. Education pays.

MISS EVA DAVIS writes: "Your Premium offer is a grand one. I have read the JOURNAL a long time and it is the best of all. Enclosed please find the money for it for 1885. I want to put all the back numbers of it for 1884 into a library for the school we are starting, as the JOURNAL suggests. Can you send the back numbers for 1884?"

We regret to say we cannot, but we will make the future numbers equally good, if not better. We have published large editions but they are exhausted.

AHEM!

HAVE you ever suffered from extreme thirst, Colonel?"

"Yes," the Kentuckian replied. "I have. I was in the southern part of Tennessee some years ago on a surveying expedition for the Government, and you may believe it or not, gentlemen, but for three days I had not a thing to drink except a pint bottle of furniture polish."

"No water to be had?"

"Yes, there was plenty of water, but when a man is enduring the agonies of burning thirst, he is not going to pay much attention to personal cleanliness."

WHY is twice ten like twice eleven? Because twice ten are twenty, and twice eleven are twenty-two (too).

"HALF-TIME SCHOOLS."

I HAVE been a great admirer of Edward E. Hale. As a boy, I read his "Scenes from Christian History," and I have generally read with pleasure and profit all that I have since seen from his pen. His article in the November North American on "Half-time Schools," is, however, a great disappointment. It is extravagant enough to be a burlesque; yet Mr. Hale evidently wrote it seriously and deliberately. He sees so much that was really excellent in the former training of a country boy, so much that is really objectionable in the plan of a modern city school, and he is so unacquainted with the latest and best types of boys' schools, that he is led into a species of injustice to all—overrating the first, and underrating all the others.

While I intend to state plainly some of the fallacies of Mr. Hale's position, and of the position to which his views logically lead, I wish it to be understood that I find much in his article to approve. With him, I plead earnestly for shorter daily sessions for young pupils, and less of the stuffing process for all grades. I believe in training the whole boy, not a part of him; "that a boy or a girl has many things to learn besides reading, writing and arithmetic." I claim that the justification of public education at the public expense, is to be found in this: that in the most effective manner it gives the moral, intellectual, and physical training necessary to enlightened and independent citizenship.

Mr. Hale's paper contains the following fallacies:

1. That, on the whole, schools and school teachers were better in this country fifty years ago than they are now. That Daniel Webster achieved greatness in consequence of the peculiar schooling he received, and not in spite of it.

2. That a teacher who has studied the art of teaching under such leaders as Horace Mann, David Page, J. P. Wickersham, Ellen Hyde, and Anna C. Brackett, is thereby the worse for it, for he has lost his "spontaneity and originality."

3. That all schools are "revolting" to pupils: That nowadays, school is no place for "spontaneous joy." Even in "Byzantium," the boys "get rather sick of it before the three months are over."

4. That the average boy who has twenty-nine weeks of vacation per year, during which he "runs errands," "waits in his father's office" [the average boy's father has no office; he works ten hours a day for another man]; loafs into "town-meetings" [i. e., ward meetings held in saloons]; watches the "smith shoe horses;" learns "how to drive, how to harness a horse, and how to grease an axle" [while associating with the hostler of

a neighboring stable]; and studies and reads "under that good master, himself;"—is likely "to learn the value of time, the necessity of punctuality, the need of subordination," and to "acquire modesty and self-control, order and method quite as well as he does at school."

5. That the old idea of school, viz: "a place for study in reading, writing and arithmetic" is the correct one. That all else in the education of a boy or girl is to be taught and learned somewhere else.

6. That, "of course," "it is clear enough" "without experiment," that such practice affairs as a knowledge of things, tools, and "the processes of handicrafts" cannot be successfully taught at school: such things "are learned more quickly and better at home," or at work.

All the quotations made above are from Mr. Hale's article; I was sorely tempted to italicize several of them, particularly in the fourth fallacy, but I decided that such a flagrant case of non-sequitur was not likely to be overlooked.

FIRST AND SECOND.

After a single remark I shall leave the first two points to the historians and normal-school men, who have already taken up arms in defence of the school of to-day.

Mr. Hale goes back fifty years to find his ideal school. He may not be aware that within a thousand miles of where I write, there are whole counties proverbially "fifty years behind the times." There one may find short terms of school, and plenty of school masters who are to the manner born, and who retain all their native "spontaneity and originality." All unknown to the rest of the world, they are doubtless training hundreds of Daniel Websters who may yet live to move the center of gravity of American eloquence across the Mississippi.

Thirdly. Mr. Hale's experience with schools must have been peculiarly unfortunate to have produced the doleful impression under which he appears to suffer. Of one thing I am sure, he never saw the bright, cheerful, happy aspect of a manual training school. I should be glad to show him one in full operation, shop, study, drawing, recitation room and all. I cannot quote my "double" as Mr. Hale does Col. Ingham, in support of my assertion, that in such a school the boys are never "sick of it;" that the daily sessions seem to them too short, and the vacations too long; but a few words that I have spoken in *propria persona* will show what actual experience has led me to say.

"The program of a manual training school has something to interest and inspire every boy. The daily session is six full hours, and I have never found it too long. The school is not a bore, and holidays, except for the name of the thing, are unpopular. I have been forced to make strict rules to prevent boys from crowding into

the shops and drawing rooms on Saturdays and after school hours. There is little tendency therefore to stroll about looking for excitement. The exercises of the day fill the mind with thoughts pleasant and profitable, at home and at night. A boy's natural passion for handling, fixing, and making things is systematically guided into channels instructive and useful, as parents freely relate."

"Manual exercises, which are at the same time intellectual exercises, are highly attractive to healthy boys. If you doubt this, go into the shops of a manual training school and see for yourselves. Go, for instance, into our forging shop where metals are wrought while hot. A score of young Vulcans, bare-armed, leather-aproned, with many a drop of honest sweat and other trade-marks of toil, stand up to their anvils with an unconscious earnestness which shows how much they enjoy their work. What are they doing? They are using brains and hands. They are studying definitions, in the only dictionary which really defines such words as 'iron,' 'steel,' 'welding,' 'tempering,' 'upsetting,' 'chilling,' etc. And in the shop where metals are wrought cold (which for want of a better name we call our machine shop), every new exercise is like a delightful trip into a new field of thought and investigation."—*Popular Science Monthly*, July, 1884, pp. 350-2.

I venture one other quotation from myself as it bears upon the evil of early withdrawal from school, pointed out by Mr. Hale:

"From the observed effect of manual training upon boys and indirectly upon parents, I am led to claim that when the last year of the grammar and the high schools include manual training, they will meet a much wider demand; that the education they afford will really be more valuable, and consequently that the attendance of boys will be more than doubled. Add the manual elements, with their freshness and variety, their delightful shop exercises, their healthy intellectual and moral atmosphere, and the living reality of their work, and the boys will stay in school. I have seen boys doing well in a manual training school who could not have been forced to attend an ordinary school."—*Ibid.*, p. 349.

Fourthly, as regards the moral effect of vacation work or play.

Mr. Hale's position is so extreme that it almost answers itself. I am as familiar with the fortunate circumstances of a farmer's boy as Mr. Hale. I have tried the school winters, and the farm summers. I know the value of a country training where a fond father is never tired of giving sound instruction and encouraging high aspirations. But the evils of which Mr. Hale complains are chiefly found in city schools; they have small foothold in the country. Now, not one per cent. of the fathers in a great city can command the facilities for teaching what he says every boy ought to learn at home during vacation. Just hear him!

"He must know what a bushel of wheat was when he saw it, and how a blacksmith shod a horse. He must learn the methods of a town meeting. He must know how to milk, how to plow, how to cradle oats, how to drive, how to harness a horse, how to take off a wheel, and how to grease an axle."

It is excellent to be highly accomplished, of course, but could he not

with equal propriety have said this?

"He must know a salmon when he sees it, and how the sailor splices a rope. He must learn the discipline of a ship. He must learn how to dress a fish, how to set, reef, and furl a sail, how to row and scull a boat, how to swim, and how to stop a leak."

The city boy is more likely to learn these than those, yet if he spends his vacation at home three-fourths of his time is worse than wasted. No time is so fruitless of good, so fruitful of evil as the long vacation. The father generally works under such conditions that he can neither employ nor entertain his son during the day. The restraints of home are soon outgrown and the boy is on the street guided by "that good master himself," learning the ways of the world under the worst possible auspices. The opportunities for paid employment are few for boys who must be called off to school in a few weeks. School takes away neither the opportunity nor the necessity for home training. Thirty hours a week is but a small part of a boy's time, and when school is conducted on the best plan there is little need for vacation. I do not see how Mr. Hale's plan could fail to greatly increase the chances of a boy's becoming a "hoodlum" or a "sport."

Fifthly, as to the province of school education. Mr. Hale assumes that it is for intellectual discipline alone, and that this is to be gained by reading, writing and arithmetic. All else, whether music, literature, sewing, drawing, or object lessons, are out of place. When there are so many things, as intellectual as penmanship, and as practical as banking and equation of payments, which every boy and girl should know, is there any good reason for limiting school education to the three R's? Is it any reason that it was so once? When Daniel Webster was a boy, there was not a railroad, nor a telephone, not even a telegraph nor a steamboat in the land. Our present methods of supplying cities with food, with fuel, with shelter, with clothing, were unknown. There was not an armored ship, nor a breach-loading gun, nor a dynamo, in the world, and one-half of the present occupations of men did not exist. Are our schools to be conducted in blissful ignorance of all this? Can the ordinary parent teach his boys how to cradle oats, to make a working drawing, to braze two pieces of iron, to make and temper a chisel, to frame a joint, or to make an electric battery, more readily than he can teach him how to read? It stands to reason that the school should teach the things most generally useful for the children to know, and which can be taught more effectually and economically at school than at home. Let no one sneer at the word "useful;" I give the unpopular word a very comprehensive meaning.

Sixthly, as to manual training.

[Concluded on page 6.]

ARKANSAS

American Journal of Education.

KELLOGG, Little Rock, Ark. } Editors.
B. MERWIN, }

MORE FACTS.

It does not appear after all that education unfits people to earn a living. There is no immediate danger of over education. Some of the States complain that they cannot afford the expense of school system running schools nine months in the year. Very well, let "National aid" be rendered them temporarily. This is especially true of some of the states in the South—and practically true of others—as true of Missouri and Arkansas as of North and South Carolina. Col. Dexter Hawkins says: "The late slave States complain of their inability to pay the expenses of free common schools, and they raised for public education in 1890 only \$10,883,104." Now look at the facts. The amount of the annual loss in these same States, from their labor being illiterate, is at least \$150,000,000. The extra productiveness of their laborers over what it is now, would—had they been educated, as in Maine and New Hampshire—establish and support free common schools nine months in the year for every child of the school age within their borders, and leave a surplus sufficient to support a free academy in every county, and a free college in every State. Ignorance costs. Education pays.

THE incidental discussion pro and con of educational matters which would ensue if all of our three hundred thousand teachers were to sign and send on petitions to Congress to have the Senate bill appropriating seventy millions for educational purposes passed, would tend greatly to get the real facts as to the necessity of this appropriation before the people. Let the petitions pour in. The money is needed.

CAN THEY DO THIS?

CAN our teachers fill these requirements on \$30 a month with school terms lasting only three months in the year? That is on a yearly income of \$90, and at the same time attend "Bicknell's Show" at a cost of from \$40 to \$60.

Col. E. B. Henry in his eloquent address of welcome to the teachers of Arkansas said:

"Each individual teacher in this broad land must stand upon the summit of the highest mountain of intelligence, holding aloft the torch of education to guide those who are struggling in the dark valley of error and ignorance below, and invite them up to share with you the same pure atmosphere. Each school house should be impressed upon the minds of our people until they come to regard it as so many intellectual light houses dotted here and there along the shores of the sea of ignorance to prevent

shipwreck and intellectual death. When this is done the silent forces of material nature will yield her hidden wealth in harmony to the skilled touch of her children, the fabric of society be perfected in its strength and the patriotism of, &c., &c."

Can they stand up there, without catching cold, on a salary of \$30 per month, teaching only three months in the year? We doubt it!

ALL TRUE.

THE *Galveston News* says: "It is people that make a country. Our State is broad, fertile and beautiful—it is to a high degree picturesque; but there is nothing of idle fancy or glitter of poetry in its make-up. It is solid of rich resources and beautiful of wealth. It only wants wise heads, appreciative souls, strong wills and sturdy arms to make it burst at once upon the world as the monarch of agricultural and commercial countries. Its fertility is incomparable, its resources illimitable, its magnitude wonderful. Truly its excellencies are indefinable. Come and see!" Texas needs better schools and longer school terms; these will give it "wise heads" and a great people, and make a great State.

CHARACTER is perfectly educated will. He who lives for himself, lives but for a little thing.

ACANADIAN emigrant; "The funds all gone?" shouted the depositor. "Every cent," replied the president. "Are you sure that he left nothing?" "He left nothing but the country."—*Portland Advertiser*.

BE sure and show our splendid premium to your friends. They, too, will want it, and you can help them secure it now while we can send it so cheaply.

WE are glad to see that the use of tobacco in schools is regarded as an evil by boards of education, and educational men who are doing no little to remove it from our institutions of learning by various means, as well as by school rules and regulations, fully justified by statutes giving school boards ample powers to pass and enforce them.

THE longest railroad in the world is said to be the Union Pacific, over three thousand miles in extent.

WHY is a chicken-pie like a gunsmith's shop? Because it contains fowl-in-pieces.

WHAT dust is most blinding to the eyes? Gold dust.

WHEN is a blow from a lady welcome? When she strikes you agreeably.

PROF. GEORGE COMER, of Camp Point, writes: "Your Premium is just splendid, beside being very useful. It seems to be a condensation of scores of books into one. Every

teacher ought to have it." All of which is true, the premium is "a condensation of scores of valuable books, and every teacher ought to have it, and can get it now by sending early for it.

MISS LYDIA TRIMBLE, from Iowa, writes: "The JOURNAL and premium came safely and promptly to hand. I am greatly pleased with both. The premium is indeed a 'library of universal knowledge' to me and all teachers. With thanks for both, I am—

Respectfully,
L. T."

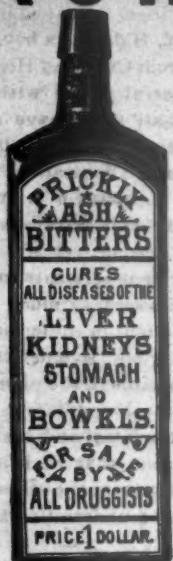
Why is a dog longer in the morning than at night? Because you take him in at night and let him out in the morning.

✓ HALF-TIME SCHOOLS.

[Continued from page 5.]

Every one seems to admit that it is a good thing for a boy to understand the theory and practical use of ordinary tools, to be able to make and read drawings as used in the arts, and to have some cultivation in the graces of form and ornament; the question is, where shall he get these things? Some say in private shops and offices; some say in private schools; Mr. Hale says at home during vacation which is to be extended to twenty-nine weeks per year in order to give time! Mr. Hale assumes that it is clear even without experiment that such things are taught more quickly and better at home than at school. Now, as a matter of fact, most boys don't learn these things anywhere. They are launched into the world imperfectly educated, and of course, strongly prejudiced against what they do not know. Those who learn them in private (commercial) shops and offices do so at great expense. It generally costs an unreasonably long time, a sacrifice of the literary and scientific parts of education, often a sacrifice of wholesome associations; and generally one gets only a narrow manual training after all. Opportunities for manual training at school, public or incorporated, have been very limited in this country, but their experience is most decisive. An experience of over ten years enables me to say, in spite of Mr. Hale, that "such things" can be taught more quickly, more fully, far better, and at much less cost at school than at home. No one who has seen what is accomplished in this direction in a good school can for a moment be in doubt about the superiority of the school method. I have spoken of my own home training on a farm. I learned to plow, to hoe, to shovel, to mow, to grind and whet a scythe, to rake, to chop; but I did not learn to use the plane, the chisel, the file, the forging hammer, nor did I know till I was a grown man that such a thing as draughting existed. My father did not teach these things

PRICKLY



BITTERS

CURES
Dyspepsia, General Debility, Jaundice, Habitual Constipation, Liver Complaint, Sick Headache, Diseased Kidneys, Etc., Etc.

It contains only the Purest Drugs, among which may be enumerated PRICKLY ASH BARK AND BERRIES, MANDRAKE, SUCRU, CENNA, ETC. It cleanses the system thoroughly, and as a

PURIFIER OF THE BLOOD
Is Unequaled.

It is not an intoxicating beverage, nor can it be used as such, by reason of its Cathartic Properties.

PRICKLY ASH BITTERS CO.
Sole Proprietors,
ST. LOUIS AND KANSAS CITY.

because he did not know them himself. It would have been worth thousands of dollars to him there on his New England farm could his boys have had the education of a manual training school.

I do not say that schools should teach trades, any more than that they should teach banking, or piano playing, or telegraphy. They should only teach principles, and methods, and the use of tools and appliances applicable to a majority of the occupations of American civilization; these they should teach for three reasons: 1. Opening the way to an intelligent choice of occupation; 2. Ensuring success in the chosen occupation; and 3. Raising the intellectual and moral standards of manual occupations.

It is scarcely necessary to add that three hours per day given to manual training (drawing and tool-work) leaves abundant opportunity for literary and scientific training, or that the intellectual development of pupils thus broadly exercised is both wholesome and rapid. If any one thinks that my program has incongruous elements, let me tell him that education hath many things not yet in his philosophy; and if he doubts the real success of such a school as I describe, let him come to St. Louis and see for himself.

C. M. WOODWARD.
WASHINGTON UNIVERSITY,
St. Louis, Dec. 30, '84.

SOLID AND FLUID.

ANNA C. BRACKETT.

IN our school days we were certainly led to believe that though matter might exist in three forms, solid, liquid, and gaseous, the solid form was that in which it tended to remain if left to itself. Somehow it used to seem as if the liquid and the gaseous states were accidents. This faith was not of our own creating, for physical science in those days certainly was under the same impression. We are now told, and in fact we know, that the liquid and gaseous states are as natural to matter as the solid state. In fact, it is quite as likely that they are more so, and that it is the solid state which is an accident, and a late accident at that. Whatever may be the order of precedence in the physical world, it is quite certain to any observant teacher that the original and natural condition of mental activity is in a state which corresponds to the state of a gas; that in the school life of a child it can progress only as far as to partake of the character of a liquid, and that it is only in adult life that it can be said at all to have the conditions of firmness, and seeming stability which characterize a solid. Many mistakes, in school work, come from the ignorance or thoughtlessness of the teacher with regard to these facts.

The characteristics of a gas are that its particles are "permanently elastic." It therefore tends to expand indefinitely, and this tendency can be restrained only by enclosing it in some containing vessel, whose form the mass assumes. It is very compressible. It may, by pressure, be condensed into a liquid. It has a "maximum tension," and a "critical temperature," at which it seems suddenly to change the arrangement of its particles. It is extremely sensitive to change of temperature, and it seems to have a "power of motion inherent in its parts."

Now, in reading over this statement of the peculiarities of gases, could we improve it if we wished to characterize the condition of the first knowledge of the child? This consists of a mass of disconnected facts, which seem to manifest, as every teacher will acknowledge, a marked tendency to fly away from each other. It yields to any outside pressure, and will admit any number of contradictory facts and statements. It can be described by no words more fitly than by those which are used in speaking of the creation. It is "without form and void."

The pressure which may be brought to bear on it to change its condition into one of more practical use, is that of school life, and here every teacher again will at once recognize the significance of the expressions: "maximum tension," and "critical tempera-

ture." It must be remembered, however, that this gaseous state is not a bad or objectionable state. It is the proper condition of the mind up to a certain stage, and far more "natural" to it than the liquid or the solid state.

We as teachers, however, have to deal with the gas only as a material. It is our place to supply the proper temperature and pressure which will convert it into a liquid. Some of us do this; some of us do not. The proper temperature and pressure on the gas, produce condensation. We might remark here that, as in physics, there are some gases which will still remain gas in spite of enormous pressure; there are also some minds which all the art of the best teachers cannot succeed in liquifying. Gas may also be turned into liquid by the process of solution. In this process, the mind of the teacher might be likened to the solvent.

But if we are busied with the change of gases to liquids, we are also occupied with the change of liquids to solids. A solid has a certain crystalline constitution which a liquid does not possess. Its particles have homes, so to speak, and relations in space. It is quite immaterial to any particle of a liquid in what part of the mass it may reside, but in a solid it is not so, and in the higher developments of solids, as in crystals, there is an inviolable principle of order and exact arrangement and relationship of which the liquid has no conception.

Now many of our errors in schools arise from the fact that we do not sufficiently recognize that a liquid is not actually a solid, we also forget that the liquid is potentially a solid. We make the first mistake when we apply to the child's knowledge tests which are applicable only to the knowledge of the adult. Such tests as written examinations for instance. The German critics of English schools understand this, and have already spoken of it. If this inappropriate test be continually applied, we shall produce a distortion. We are trying to treat as solid what, as yet, possesses none of its attributes. Let me illustrate. When a child goes to work to translate a sentence from some foreign tongue—and I presume also when he first tries to read sentences in his own—his natural way is to find first the meaning of every word in the sentence in the order in which they come, and then to try to put them together. The words float about in his mind as the particles in a liquid, and as they are perfectly indifferent to position, we have the curious translations which so often cause amusement. The brighter and more imaginative the child is, the more ingenious and far-fetched will be the translation. Now when we teach him that he is first to find his subject, no matter where it is, and then the verb and object, we are bringing to bear the

pressure which helps him to solidify his knowledge by getting, at any rate, two or three fixed points for the other particles to cluster about.

Even then his ideas will be fluid, because, the subject having been determined, may be found to have several meanings, and he must be taught that he cannot decide on any one till he knows the meaning of the verb. Here the same difficulty will present itself, and it is just in this suspension of the judgment till the relation of the parts shall decide the doubly uncertain question, that we find the beginning of the proper solidifying process. Every written examination that we give to a child whose mind is in the liquid state, retards or helps altogether to prevent the normal process, and to produce an appearance of knowledge where there is none; for knowledge does not consist in the amassing of unrelated facts. Knowledge, which is worthy of the name, subsists only in the regions of relativity. Into that region it is our business to conduct the child-mind. There is the region of solidity. There only is the knowledge which is power.

This subject is deserving of elaboration, as it is far too wide reaching to be properly treated in a newspaper article. It may serve, however, as a suggestion, and if it shall in only one case, prevent the applying of the stiff written examination test to the fluid knowledge of a child, it will have answered its purpose.

WHY is a kiss like a sermon? Because it requires two heads and an application.

Catarth Cured.

A CLERGYMAN, after suffering a number of years from that loathsome disease, Catarth, after trying every known remedy without success, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to Dr. J. A. Lawrence, 199 Dean street, Brooklyn, New York, will receive the receipt free of charge. 17-12 18-5

HORSFORD'S ACID PHOSPHATE As a Brain Food.

Dr. S. E. NEWCOMER, Greenfield, O., says: "In cases of general debility, and torpor of mind and body, it does exceedingly well."

A POPULAR FALLACY.

Many people think that Rheumatism cannot be cured. It is caused by a bad state of the blood which deposits poisonous matter in the joints and muscles causing lameness, stiffness and swelling of the joints and excruciating pains. Kidney-Wort will certainly effect a cure. It acts on the Kidneys, Liver and Bowels, stimulating them to a healthy action, purifies and enriches the blood and eliminates the poison from the system. Go to the nearest druggist, buy Kidney-Wort and be cured.

Keep this in mind. In the Diamond Dyes more coloring is given than in any known dyes, and they give faster and more brilliant colors. 10c. at all druggists. Wells, Richardson & Co., Burlington, Vt. Sample Card, 32 colors, and book of directions for 2c. stamp.

WHY is the map of Turkey in Europe like a dripping-pan? Because there is Greece at the bottom.

GAIN Health and Happiness.

How? DO AS OTHERS HAVE DONE.

Are your Kidneys disordered? "Kidney Wort brought me from my grave, as it were, after I had been given up by 13 best doctors in Detroit." M. W. Devereaux, Mechanic, Ionia, Mich.

Are your nerves weak? "Kidney Wort cured me from nervous weakness, after I was not expected to live." Mrs. M. M. B. Goodwin, Ed. Christian Monitor Cleveland, O.

Have you Bright's Disease? "Kidney Wort cured me when my water was just like chalk and then like blood." Frank Wilson, Peabody, Mass.

Suffering from Diabetes? "Kidney Wort is the most successful remedy I have ever used. Gives almost immediate relief." Dr. Philip C. Ballou, Monkton, Vt.

Have you Liver Complaint? "Kidney Wort cured me of chronic Liver Disease after I prayed to die." Henry Ward, late Col. 69th Nat. Guard, N. Y.

Is your Back lame and aching? "Kidney Wort (1 bottle) cured me when I was so lame I had to roll out of bed." C. M. Tallmage, Milwaukee, Wis.

Have you Kidney Disease? "Kidney Wort made me sound in liver and kidneys after years of unsuccessful doctoring. Its worth \$10 a box." Sam'l Hodges, Williamstown, West Va.

Are you Constipated? "Kidney Wort causes easy evacuations and cured me after 16 years use of other medicines." Nelson Fairchild, St. Albans, Vt.

Have you Malaria? "Kidney Wort has done better than any other remedy I have ever used in my practice." Dr. R. K. Clark, South Hero, Vt.

Are you Bilious? "Kidney Wort has done me more good than any other remedy I have ever taken." Mrs. J. T. Galloway, Elk Flat, Oregon.

Are you tormented with Piles? "Kidney Wort permanently cured me of bleeding piles. Dr. W. C. Kline recommended it to me." Geo. H. Horst, Cashier M. Bank, Myerstown, Pa.

Are you Rheumatism racked? "Kidney Wort cured me, after I was given up to die by physicians and I had suffered thirty years." Elbridge Malcolm, West Bath, Maine.

Ladies, are you suffering? "Kidney Wort cured me of peculiar troubles of several years standing. Many friends use and praise it." Mrs. H. Lamoreaux, Isle La Motte, Vt.

If you would Banish Disease and gain Health, Take

KIDNEY-WORT THE BLOOD CLEANSER.

PRANG EDUCATIONAL COMPANY. Publishers and Dealers in

Educational Apparatus and Material

Prang's American Text Books of Art Education.

A system of Drawing used in the leading cities of the country. This system has a wider adoption than all other systems united.

Prang's Natural History Series for Schools.

Intended to be used as aids for Object Teaching. Prang's Natural History Series for Children.

Intended to be used for Supplementary Reading. Prang's Trades and Occupations.

Splendidly illustrated for Object Teaching. Prang's Color Chart, adopted by

Boston School Board. For teaching Color in Primary Schools.

Manufacturers of Prang's Drawing Models,

Prang's School Pencils, Prang's School Compasses.

Dealers in Scientific Apparatus and Materials for Schools and Colleges.

For catalogues and particulars address THE PRANG EDUCATIONAL COMPANY 7 Park Street, Boston.

THE HIGH SCHOOL INDEX.

A monthly journal devoted to the moral and literary culture of youth, and to the interests of country and village schools.

Contains Supplementary Readings for Schools, Prize Departments and other interesting articles.

Subscription, 50 cents per year. Send for Sample copy and club rates to A. W. DUFF, Proprietor, Troy, Mo.

TENNESSEE

American Journal of Education.

W. E. BELL, Nashville, Tennessee. } Editors.
J. B. MERWIN }.

Is it not time something more effective was done for the school interests of this State? Let the House of Representatives pass the Senate bill appropriating seventy-seven millions without delay, and the schools can be carried on—the teachers paid—and a new era of prosperity will be inaugurated at once.

It may be said without the fear of successful contradiction, that it is a general law of modern civilization, that an illiterate person is from twenty to thirty times as liable to become a pauper and a charge upon the public as is one with an average common-school education; and that the annual loss to the community, in the United States, in the productive power of the illiterates, and in the support of paupers, made such by illiteracy, is nearly if not quite equal to the amount that would be required to establish and maintain a free common school the year around in every State in the Union, amply sufficient for the whole fifteen millions of the school age in the United States.

The key to self-support is education. Money and labor invested in education, are capital invested in such a manner that the principal is absolutely safe, and the income large, sure and promptly paid. Our teachers furnish the "key to self-support."

DIDN'T KEEP IT.

WELL, Mr. Slickers," said the doctor, to a patient he had not seen the day before, "how are you getting along?"

"Nearly starved to death."

"Why, didn't you have oysters?"

"No, I couldn't get them the way you said, and I was afraid it would be dangerous to eat them any other way."

"Why that's odd. Couldn't get stewed oysters?" I told you you could eat stewed oysters with impunity."

"That's just it. I could get the stewed oysters easy enough, but I sent to all the restaurants in the neighborhood for the impunity, and the blazed fools said they never had such a thing on the bill of fare."

[If Mr. S. had subscribed for this Journal, and secured our Premium he would have found it in both. Poor fellow!]

WHAT is the difference between a school-master and a railroad conductor? One trains the mind, and the other minds the train.

LET there be a pull all along the line for municipal suffrage for women.

The granting of this is plainly in the power of State Legislatures.

A CRY FROM MACEDONIA.

"Come and help us."

The following letter from the Orient surprised and gratified us, as indicating that the AMERICAN JOURNAL OF EDUCATION is known in far distant climes. It now enters the very land of the conquering Alexander, and bids fair to spread its influence there, as a potent factor, in the upward progress of that far-off people.

Here is the letter:

SOPHIA, BULGARIA, Nov. 22, 1884.

Editor AMERICAN JOURNAL OF EDUCATION.

St. Louis, Mo., U. S. of America.

GENTLEMAN:—A few teachers have asked me for an AMERICAN JOURNAL OF EDUCATION. I find only yours. I should feel much obliged for a few sample copies. Yours truly,

GEO. N. VITANOFF.

We send them with pleasure.

Education includes religion, morality, and knowledge. A school is an organized community, as much a personal, a corporal entity as a township. It has its citizenship, and its obligations. It is there the child has its first experience in association with his fellows, with his peers. There are the same struggles, and passions, and ambitions, and temptations, and the same demand for observance of law, restraint from evil, and reverence for truth as in the larger and wider community for which he is fitting himself. That is its great recommendation. It is the training school of the embryo citizen for his citizenship.

A FINE METHOD.

WE do not remember to have seen anything better than the following method for the study of HISTORY.

Certainly it is very suggestive and must be welcomed by all our teachers:

1. The teacher should examine the subject of history from three points: 1. What am I to teach? 2. Why am I to teach the subject? 3. How am I to teach the subject?

2. An intelligent consideration of the above questions in the order stated will greatly assist the teacher in presenting the subject to his class. The consideration of the first subject leads to the following topics:

a. What is the nature of the subject in itself considered.

b. What are its limitations—in time and space.

c. How related to and distinguished from other subjects.

d. Viewed as a whole, what are the parts which compose it?

e. What is the relation of the whole to the parts, and of the parts to the whole?

f. Periods, epochs, eras, etc., each defined.

- The objective view of history.
 - The subjective view of history.
 - Definitions and comparisons.
 - What is General history.
 - What is U. S. History.
 - Compared with the history of other nations, how does it differ.
- Completeness of the records of the birth and growth of the United States.
 - Origin in the broad light of civilization.

Ends or Objects to be Obtained by the Study.

- Knowledge.
 - Value as a mental discipline.
 - Vast fund of information.
 - Assistance in the acquisition of other knowledge.
 - Discrimination as to what is important.
- Uses to which the knowledge is to be put.
 - To be made real by association of places.
 - Gradual development of causes into results.
 - To be studied as cause and effect, viz: Viewed as a cause, what effect does it produce? and as an effect, what cause produced it?
- Moral instruction.
 - Influence of noble deeds and characters.
 - Mistakes of men as effecting themselves and subsequent history.
 - Effects of treachery and crime on character.
 - The cost of liberty and peace of to-day.
- Use to the citizen.
 - In the information it gives him of the past.
 - In the cultivation of a spirit of patriotism.
 - In a knowledge of rights and duties, etc.
 - In the appreciation it gives him of an honest administration of affairs.
- A guide in the choice of officers.

The increased circulation of the AMERICAN JOURNAL OF EDUCATION among the teachers, and the people, will help matters materially. Prof. N. L. Eagleton says the Journals and the premiums came duly to hand. We are greatly pleased with them. They are all, and more than we expected, and exceed your recommendations by far. The Journal is strong, practical, and helpful to every teacher. I send a list of names for the JOURNAL.

A TEUTONIC friend ran a foot race and lost it, but ran again and won. He said: "I'm first at last if I was behind before."

TOBACCO destroys the memory, unfits one for thought, for study and for business. A man who uses tobacco will agree to do a thing one minute and never think of it again. His memory is treacherous; his mind as well as his body is dyspeptic, tremulous and disabled."

Practical Elocution!

By J. W. SHOEMAKER, A. M.

Designed for use in Schools and Colleges and for all interested in Elocution.

30 pages, handsomely bound, post-paid, \$1.25. A condensed yet comprehensive treatment of the whole subject of Elocution, giving brief consideration to all the topics bearing upon natural expression. Voice, Articulation, Expression, Gesture, and Methods of Instruction, comprise the chief departments of the work each department being illustrated by varied and appropriate examples, so selected as to afford the broadest application.

Prof. B. L. Cunnock, Professor of Rhetoric and Elocution in the Northwestern University, Evanston, Ill., says: "One of the best books I have seen for work in the recitation room."

Liberal discount for introduction.

For sale by all booksellers, or by the Publishers

National School of Elocution and Oratory,

1416 and 1418 Chestnut Street, Philadelphia, Pa. (Publication Department.)

A STRANGE & WONDERFUL BOOK Old Gypsy Madge's Fortune Teller And the Witches Key to Lucky Dreams.



You can now tell your own Fortune; what will happen you; how to win the Heart and the Hand you desire; how to interpret any dream; the Love Charm; who your husband will be; when you will marry; what Fortune you will have; your Lucky Days; what you will succeed in; what your Absent one is doing; whether your Husband or Wife is true; whether you will marry; will your Marriage be happy; about your Children; how you can conquer in Love; whether you will be a Widow; whether you will die Rich; Even Signs of Speedy Marriage; how to Unravel Secrets and Find Hidden Treasures; how to Control others; how to Light a Lantern; Trouble Vanishes; Old Madge can bring you Good Fortune; don't spurn her; She is Powerful for Good or Evil. This Book sent by mail Post-paid for 50 cents. Address FRANK O. WELSHKEY, Providence, R. I.

17-12-18-1

USE DIAMOND CATARRH Dr. Evory's DIAMOND Remedy.

It gives immediate relief. It has cured the most stubborn cases of Catarrh, Influenza, Hay Fever, Bronchitis, Deafness, removed Polypus, and terminated that most offensive Catarrh condition, Fetid and sickening breath cold in the head, throat, etc., 50 cents, by all druggists and A. F. EVORY & CO., Proprietors, 106 Greenwich St., N. Y. Descriptive pamphlets free.

3 Printing Press Do your own Printing
Card and Label Press \$3. Larger sizes \$5.10. For old or young. Everything easy. Send 2 stamps for Catalogue of Presses, Type, Cards, &c. to the factory.
Kelsey & Co., Meriden, Conn.
18 1-2-3

Good Printing at Reasonable Rates.

SLAWSON & CO., BOOK AND JOB PRINTERS,

1. W. COR. MAIN & OLIVE STS.,
ST. LOUIS.



Estimates of cost of any kind of Printing or Binding furnished with promptness. All work entrusted to us will be promptly and neatly done, at lowest rates, and shipped to any part of the country.

FREE TO ANY LADY
Readers of this paper who will agree to show our catalogue and price list of Rubber Goods to their friends and try to induce sales for us. We will send you free, post-paid two full sized, LADIES' GOSWELL RUBBER WATER PROOF GARDENERS, as a sample, and one of our handsome Colored Covers 44 page Catalogue with wholesale price list showing how you can make a nice profit right at home. Send 50 cents for postage, packing, &c. (Stamps or silver taken.) Cut this out and send it to
B. A. BABCOCK & CO., CENTERBROOK, CONN.

SHORTHAND Instruction taught by mail or personally. Good situations provided all pupils when competent. Photography, thoroughly learned, opens the best field for young people, especially for educated young ladies. Send for circular. W. G. CHAFFET, Greenock, N. Y.

Patents Send Stamp for our New Book on Patents. L. BINGHAM, Patent Lawyer, Washington, D. C.
je-17-6

BIRCH'S KEY AND NOT
WILL WIN ANY WATCH WEAR OUT
by watchmakers. By mail. Circulars free. J. S. BROWN & CO., 35 DAY ST., N. Y.
\$65 A MONTH and board for 3 live young men or ladies in each county. Address F. W. Ziegler & Co., Chicago, Ill. 16-17

COLORADO.

COLORADO wheels into line as will be seen by the following letter. We hope every teacher in the State will get our splendid premium, now while we can send it to them so cheaply.

EDITORS AMERICAN JOURNAL OF EDUCATION,

Gentlemen: The JOURNAL and World's Cyclopedia please me so much and are altogether so useful that I feel that no teacher should be without them, and I am determined to use my influence to have my friends secure them without further delay.

As for the premium it far surpasses my expectations. The more I read of both the JOURNAL and the Cyclopedia the better I like them. It is a book that should be in every family too. I wish to suggest also that you have a self-binder for the JOURNAL so it can be preserved for ready reference. I am sure your subscribers would be glad to order them. Colorado you know works for a definite course of study in the ungraded schools, as laid down in the Report of State Supt. Hon. Leonidas S. Cornell.

We are doing our best out here on the borders, and we find your Journal a great help.

HARRY GRANT.

DELTA CO., COLO., Dec. 20, 1884.

HOW TO USE GLOBES.

THE following will be found to be among the most useful and practical methods or exercises to show the use and value of a Globe in the school.

1. The earth as a planet.
 - a. Size, compared with size of sun and other planets.
 - b. Distance from the sun.
 - c. Relative distance, as compared with other planets.
 - d. Time of revolution around the sun.
2. Annual motions of the earth.
 - a. The Ecliptic and the Celestial Equator.
 - b. The Equinoxes.
 - c. The Solstices.
 - d. The cause of the change of seasons.
 - e. Comparison of seasons north and south of the equator.
3. Diurnal motion of the earth.
 - a. The cause of day and night.
 - b. The cause of inequality of day and night.
- c. The periods of longest and shortest days.
- d. The transit of the midnight sun seen in polar regions.
4. The Zones: the boundaries of each; how determined; the width of each.
5. Time: Sidereal time; solar time; mean solar (clock) time.

Exercises to Accompany the Use of the Lunar Tellurian.

THE MOON.

1. The size of the moon.
2. Distance from the earth.
3. Time of revolution around the earth.

4. Time of rotation on its axis.
5. The moon's orbit; nodes.
6. Motions and phases.
 - a. The new moon: direction of the horns.
 - b. The first quarter.
 - c. Gibbous phases.
 - d. The second quarter—full moon.
 - e. The third quarter; direction of the horns.
 - f. The dark moon.
 - g. "Running" high and low.
 - h. "Wet" and "dry" moons—inclinations of crescent.
 - i. The "harvest moon."
 - j. The "hunter's moon."
 - k. The moon's variations in the time of rising. Their cause.
 1. Eclipses. a. Solar. b. Lunar. c. Kinds—total, partial, annular.

NEBRASKA.

THIS State pours her corn and wheat into St. Louis as the people find this the best market and the teachers pour their subscriptions in also for the AMERICAN JOURNAL OF EDUCATION and secure the splendid premium offered. Prof. A. W. Vandunlin, Superintendent of Saunders Co., says in sending in subscribers, I like the JOURNAL very much and the premium is "a valuable hand book for both the teacher and the farmer and school officer. It is *mutuum in parvo*."

Miss Carrie Chapman, of Gage Co., Neb., writes us, "I find the JOURNAL such a help in the school-room and out of it that I shall do all I can to increase its circulation. The premium is well worth five times the price, to any teacher."

Miss Della Brown, of Swift, Neb., writes, "The JOURNAL and premium came promptly. Either one—the Cyclopedia or JOURNAL is worth to any teacher double the money paid. The valuable 'methods' given in the paper are a great practical help."

Prof. G. T. Sprecher, of Neb., says, "The JOURNAL and premium received I confess I do not see how you can give so much for so little."

PENNSYLVANIA.

EDITOR AMERICAN JOURNAL OF EDUCATION.

THE Lehigh County Teachers Institute was held in the Court house, Allentown, Pa., during the week commencing Dec 8. It was the best one held yet in Lehigh Co. Including the teachers of the city of Allentown, there are 326 teachers in the county, and every one was present, a thing which never occurred before in this county, and I doubt whether it was the case in any other. The interest exhibited by the teachers, and others, in the proceedings of the Institution, tends to encourage the officers to even greater efforts in the future. The only trouble hereafter will be to find a larger room to accommodate the teachers, and others who take

an interest in the education of our youths. The instructors were Dr. N. C. Schaeffer, Principal, K. S. N. S. Kirtztown, Pa.; Prof. T. E. Ballier, Cook Co., Ill. Normal School; Prof. G. E. Little, Washington, D. C.; Dr. A. R. R. Horne, Allentown, Pa.; Prof. Kamp, K. S. N. S.; Dr. E. E. Higbee, State Supt. of schools of Penn.; Prof. S. M. Phillips, of West-Chester Normal School. The lecturers were Col. L. T. Copeland and Prof. T. E. Ballier.

A. H. K.

It is stated that Pennsylvania has 3,846 post offices—more than any other State in the Union, New York coming next, from which it would seem that William Penn is still in the van of the marching column.

If our friends in Pennsylvania will write to the chief clerk of the State Superintendent in INDIANA they will get some very valuable hints and suggestions on the matter of *grading* country schools. His address is Indianapolis, Ind. He has probably done more in this direction than any other person, and has solved this problem in a practical way.

Supt. Snyder, of CARBON Co., says: "Our directors have lengthened the school term from five to six months. Weatherby district has increased the number of its schools from eight to ten. All examinations have been held and the schools are all supplied with teachers."

Don't haggle about twenty or thirty dollars a month more, as compensation to a competent, cultured man or woman as a teacher for your children. Incompetency and narrowness mars and hinders and cripples intelligence and culture, and character illuminate and inspire and broaden. These are the qualities most needed in a teacher. You cannot command these qualities on low wages and short terms.

We have not seen a better example of the concise form of expression common to the real Western American than the answer of the man of the Sierras, who, when asked about the character of a neighbor, replied: "Mister, I don't know very much about him; but my impression is that he'd make a first-class stranger."

It is said an Irish woman, during the last campaign, who had sold her husband's vote, went with him to the ballot-box, and guided his hand in depositing it in the ballot-box in his drunkenness, and no one thought it was improper.

IMPORTANT!

When you visit or leave New York City via Grand Central Depot, save baggage, expressage and \$3 carriage hire, and stop at the GRAND UNION HOTEL, opposite said depot. SIX HUNDRED elegant rooms fitted up at a cost of \$1,000,000; \$1 and upwards per day; European plan; elevators; restaurant supplied with the best. Horse cars, stages and elevated railroad to all depots. Families can live better for less money at the Grand Union Hotel than at any other first-class hotel in the city.

17-11-18-5

WHAT IS CATARRH?

(From the Mail, (Canada), Dec. 15).

Catarrh is a mucous-purulent discharge caused by the presence and development of a vegetable parasite in the internal lining membrane of the nose. This parasite is only developed under favorable circumstances, and these are: morbid state of the blood, as the blighted corpuscle of tubercle germ poison of syphilis, mercury, toxemia, from the retention of the effete matter of the skin, suppressed perspiration, badly ventilated sleeping apartments, and other poisons that are germinated in the blood. These poisons keep the internal lining membrane of the nose in a constant state of irritation, ever ready for the deposit of the seeds of these germs, which spread up the nostrils and down the fauces, or back of the throat, causing ulceration of the throat; up the eustachian tubes, causing deafness; burrowing in the vocal cords, causing hoarseness; usurping the proper structure of the bronchial tubes, ending in pulmonary consumption and death.

Many attempts have been made to cure this distressing disease by the use of inhalants, medicated vapors and other ingenious devices, but none of these treatments can do a particle of good until the parasites are either destroyed or removed from the mucous tissue.

Some time since a well known physician of 40 years' standing, after much experimenting, succeeded in discovering the necessary combination of ingredients which never fail in absolutely and permanently eradicating this horrible disease, whether standing for one year or forty years. Those who may be suffering from the above disease, should, without delay, communicate with the business managers,

Messrs. A. H. DIXON & SON,

305 King St. West, Toronto, Canada.

and inclose stamp for their treatise on Catarrh. What the Rev. E. B. Stevenson, B. A., a Clergyman of the London Conference of the Methodist Church of Canada, has to say in regard to A. H. Dixon & Sons New Treatment for Catarrh: OAKLAND, ONT., CANADA, March 17, '85.

Messrs. A. H. DIXON & SON:

DEAR SIR: Yours of the 13th inst. to hand. It seems almost too good to be true that I am cured of Catarrh, but I know that I am. I have had no return of the disease, and never felt better in my life. I have tried so many things for Catarrh, suffered so much for so many years, that it is hard for me to realize that I am really better.

I consider that mine was a very bad case; it was aggravated and chronic, involving the throat as well as the nasal passages, and I thought I would require the three treatments, but I feel fully cured by the two sent me, and I am thankful that I was ever induced to send to you.

You are at liberty to use this letter, stating that I have been cured by two treatments, and I shall gladly recommend your remedy to some of my friends who are sufferers.

Yours, with many thanks,

REV. E. B. STEVENSON

Send stamp for descriptive pamphlet.

We do not find it necessary to travel the country quacking, in order to dispose of our remedy; we do our business at home only, and we ship to all parts of Canada, United States and Great Britain. This, to a thinking person, should be a substantial proof that our remedy is all that we claim for it.

OBSERVE.—Our remedy is easily applied—it is used only once in 12 days, and its application does not interfere with business or ordinary duties. We give every case our special attention.

None Genuine Without Our Signature.
17-11

Our New School Aids are the best and cheapest system for conducting schools in good, quiet order. Each set contains 150 pretty chromo credit cards, 50 large, beautiful, chromo merit cards, and 15 large elegant artistic chromo excelsior cards, price per set \$1; half set, 60 cts. 500 new designs brilliant artistic chromo school reward, excelsior merit, credit, diploma, birthday, Easter, friendship remembrance, address, visiting, Christmas, New Year, scripture and gift cards at 5, 10, 20 and 25c. per dozen. Large set samples 15c. If you do not care to order samples, send any amount you wish; stating number and kinds of cards wanted, and we will certainly please you. Price list, order blanks, return envelopes free. All postpaid by mail. Stamps taken. Please send a trial order.

VINE ART PUBLISHING CO., WARREN, PA.

COMMON SCHOOL

Examiner and Review.

2,000 difficult questions and problems, with answers, in all the branches required for a teacher's first grade certificate, from examination papers of State, County and City Superintendents of 19 States. 347 pages. Price, \$1. Sent postpaid on receipt of price. Address

I. H. BROWN & CO.,
17h-18g 210 and 212 Pine St., St. Louis, Mo.

T. H. FERRIN : E. A. SMITH.

PERRIN & SMITH,

Printers, Binders and Publishers,

210 Olive St., ST. LOUIS, MO.

Refer to this paper as a specimen of their work. College Catalogue and School Printing a Speciality. Get our Estimates before placing orders elsewhere.

ILLINOIS.

American Journal of Education.

E. N. ANDREWS, Chicago..... { Editors
J. B. MERWIN..... {

ILLINOIS.

WE find the following interesting figures in the advance sheets of the report of Hon. Henry Raab, State Superintendent, and take pleasure in calling special attention to the

INCREASE OF WAGES,
paid the 19,879 teachers in this great State, who are doing such a grand work for the people. There was an average increase of \$44.41 paid to every gentleman teacher in the State, and an average increase of \$26.44 paid to every lady teacher in the State in 1884 over 1882.

These facts show some of the good results secured by circulating this Journal more liberally among the tax payers, showing as we do, the value and necessity of the work our teachers are doing. There are it seems 1,069,274 children of "school age" in Illinois, ranging in age from 6 to 21 years. There are 728,681 pupils enrolled in the public schools, a gain of 15,250 in two years, and 75,821 in the private schools, a gain of 8,441. Compared with the gain in the school population, this increase shows that less than one-half of the new school population has entered the public schools. The aggregate enrollment in public and private schools of 804,502, shows that 264,772, or nearly one fourth of the population of school age is not enrolled at all. There were 308 new school houses erected in 1884. There are 6,714 male teachers, and 13,183 female teachers employed, a total of 19,897. They were paid average salaries of \$468.60 for males, and \$377.60 for females in 1882, and \$513.10 for males and \$404.40 for females in 1883 and 1884. This increased the aggregate of the teachers pay roll from \$4,985,769 to \$5,640,473. The total receipts for school purposes increased from \$8,119,860 to \$9,387,101.

Although there were only two hundred new teachers added to the force employed, the attendance at the teachers institutes increased from 6,712 teachers to 11,406, because of a change in the school law by the Legislature, making fees paid to the State for examinations for teachers certificates applicable to the expense of conducting the teachers institutes. The average daily attendance of the graded school pupils was 79 per cent. and of the pupils in the ungraded schools is 57. The tuition of the pupils cost the State an average amount of \$11.89 per annum in graded schools, and \$11.85 in ungraded schools.

The Superintendent recommends to the General Assembly the urgent necessity for an immediate appropri-

tion to rebuild the Southern Illinois Normal School, destroyed by fire at Carbondale last winter, and in this recommendation he is very strongly sustained by those who are at all familiar with the great good accomplished by this institution. Year after year it has been a growing intellectual and moral force, uplifting and upbuilding the State in all the interests of a higher civilization.

Mr. J. N. Matthews in the *Current* of Dec. 13, says:

Ising of a land of peace and light,
Of labor, love and liberty;
A land wherein the prophet's see
The dawn of progress infinite.

A free born people proud and great,
With heart and hand to do and dare;
With strength to fashion, firm and fair
The fabric of the growing state.

If our public schools are to educate the community into the most useful citizenship, they will not do it by a partial and one-sided course, which reaches them through books and lectures only. Every man is the better educated if he knows how to work with his hands, whether he is to earn his livelihood thereby or not.

Mr. J. W. Greathaus, of Mt. Carmel, Ill., writes, "The premium came safely. There is always some one helping us. If every teacher would secure it while they can get it so cheaply and easily it would greatly advance the educational interest and intelligence among the masses in the State. We wish every school officer in Illinois would read the *AMERICAN JOURNAL OF EDUCATION*. We suggest to teachers to loan the paper for this purpose."

SPELLING BY SOUND.

A RITE suite little buoy, the sun of a grate kernel, with a rough about his neck, flue up the rode swift as a deer. After a thyme he stopped at a gnu house and wrung the belle. His tow hurt hymn and he kneaded wreat. He was two tired to raze his his fare, pall face. A feint mown of pane rows from his lips. The made who herd the belle was about to pear a pair, but she through it down and ran with awl her mite, for fear her guessed wood knot weight. Butt, when she saw the little won, tiers stood in her eyes at the site. "Ewe poor deer! Why due you lye hear? Are yew dyeing?" "Know," he said, "I am feint to the corps." She boar him in her arms, as she aught, too a rheum where he mite be quiet, gave him bred and meet, held cent under his knows, tide his choler, rapped him warmly, gave hymn some suite drachms from a voll, till at last he came fourth hall as a young horse. His I shown, his cheek was as read as a flour, and he gambled for aholé our.

WHAT is the worse seat a man can sit on? Self-conceit.

A SUGGESTION.

WHAT do you think of it? It is this: that the school directors buy the necessary text-books at the expense of the district, at the lowest wholesale rates, and supply the schools gratis; the books to be carefully preserved, and returned when the children leave the school, or have got through with them. This has been the practice in the public schools of Philadelphia, almost from time immemorial, and it is also the plan adopted with approval in not a few districts in various parts of the State of Pennsylvania. It effects a large saving in cost, and, so far as we can learn, is very satisfactory. Where it has been given a fair trial under favorable conditions, they would not have it otherwise.

Text-books are as essential a part of the appliances of the school-room as fuel and furniture—as maps, globes, charts and blackboards—and in the nature of the case there is no reason why they should not be classed in the same category, and paid for out of the same fund.

Is there?

What do you think of it?

The city of Chicago now claims to have a population of 629,985, an increase of 128,681 in the past four years or nearly 25 per cent. It is estimated from reliable sources that St. Louis has now 438,152 inhabitants, a gain of 87,630 in four years, or nearly 24 per cent.

INDIANA spent last year over \$1,000,000 for public schools and employed 6,000 women as teachers at an average monthly salary of \$35.80; too low—and 1,000 men at average monthly salary of \$57.40.

WHILE both houses of Congress are in session, 750 persons are employed in and about the national capitol to wait on the members. The aggregate daily salary of members is \$10,000.

YALE and Harvard Colleges have so changed their course of study as to make English language and English and American history more important than Greek and Latin. The Michigan University last year had 1,400 students, 900 of whom were women. The faculty of this University has two women among its faculty. The school teachers in the State of Vermont are prohibited from using tobacco.

CIVIL engineers have recently estimated that the flow of the Niagara river is 275,000 cubic feet per second, and the fall, 65 feet above the rapids and 165 feet at the falls, total of 230 feet, or equivalent to 7,000,000 horse power. Nearly all this power can be utilized for factories and for generating electricity without marring the scenic effect. A movement for using this power has been inaugurated.

Twin Foes to Life

Are Indigestion and Constipation. Their primary symptoms are among the most distressing of minor human ailments, and a host of diseases, speedily resultant from them, mutually aggravate each other and result at once the whole machinery of life. Nausea, Foul Breath, Sour Stomach, Dizziness, Headaches, Bilious Fever, Jaundice, Dyspepsia, Kidney Diseases, Piles, Rheumatism, Neuralgia, Dropsy, and various Skin Disorders, are among the symptoms and maladies caused by derangement of the stomach and bowels.

A Thorough Purgative

medicine is the first necessity for cure. Then the cathartic effect must be maintained, in a mild degree, just sufficient to prevent a recurrence of costiveness, and at the same time the liver, kidneys and stomach must be stimulated and strengthened.

Ayer's Pills

Accomplish this restorative work better than any other medicine. They are searching and thorough, yet mild, in their purgative action. They do not gripe the patient, and do not induce a costive reaction, as is the effect of other cathartics. Withal, they possess special properties, diuretic, hepatic and tonic, of the highest medicinal value and

Absolutely Cure

All diseases proceeding from disorder of the digestive and assimilatory organs. The prompt use of AYER'S PILLS to correct the first indications of costiveness, averts the serious illnesses which neglect of that condition would inevitably induce. All irregularities in the action of the bowels—looseness as well as constipation—are beneficially controlled by AYER'S PILLS, and for the stimulation of digestive organs weakened by long-continued dyspepsia, one or two of AYER'S PILLS daily, after dinner, will do more good than anything else.

Leading Physicians Concede

That AYER'S PILLS are the best of all cathartic medicines, and many practitioners, of the highest standing, customarily prescribe them.

AYER'S PILLS,

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.

[Analytical Chemists]

For sale by all Druggists.

TUTT'S PILLS

25 YEARS IN USE.

The Greatest Medical Triumph of the Age!

SYMPTOMS OF A TORPID LIVER.

Loss of appetite, Bowels costive, Pain in the head, with a dull sensation in the back part, Pain under the shoulder-blade, Fullness after eating, with a disinclination to exertion of body or mind, Irritability of temper, Low spirits, with a feeling of having neglected some duty, Weariness, Dizziness, Flattering at the Heart, Dots before the eyes, Headache over the right eye, Restlessness, with a full dream, Highly colored Urine, and

CONSTIPATION.

TUTT'S PILLS are especially adapted to such cases, one dose effects such a change of feeling as to astonish the sufferer. They increase the Appetite, and cause the body to Take on Flesh, thus the system is nourished, and by their Tonic Action on the Digestive Organs, Regular Stools are produced. Price 25c. 44 Murray St., N.Y.

TUTT'S HAIR DYE.

GRAY HAIR or WHISKERS changed to a GLOSSY BLACK by a single application of this DYE. It imparts a natural color, sets instantaneously. Sold by Druggists, or sent by express on receipt of \$1. Office, 44 Murray St., New York.

Pensions to Soldiers & Heirs. Send stamp for Circulars. COL. L. BINGHAM, Atty., Washington, D. C.
30-17-6

KENTUCKY.

EDUCATIONAL interests are growing in this old commonwealth. It was a misfortune that the paper *Kentucky Educator* could not be sustained, but our old friend Col. Allen is too much of a matinet to succeed as an editor. At the head of a Military Institute he is unsurpassed, and as a friend, as genial and bright and royal as a June day.

Kentucky sadly needs "National Aid" to place her public school system on a proper basis. There are over 6,000 teachers in Kentucky. Teachers who are doing faithful, efficient work for the best interests of the State.

A correspondent of the *News* states in answer to Senator Beck's uncalled for attack on the appropriation of seventy-seven millions for educational purposes by the Senate, that there are 214,000 white persons in Kentucky who cannot read or write, and, too, that the large majority of the white children of the State are being educated by teachers, the greater part of whom are paid about eighteen dollars per month, and the schools are only open from three to ten months of the year.

Kentucky is able and should pay her teachers more liberally, and the schools with such a state of facts as above indicated, should continue nine months during the year.

THE whole number of Post Offices in this country on June 30, 1884, was 50,017.

THE teacher in one of the schools was a little crochety the other morning and made the girls stand around a little livelier than usual. One of the little misses who had been upbraided, exclaimed to her companion: "Never mind Cleveland is elected and she'll be turned out!"

THE greatest increase in Post-Offices last year in any of the States and Territories was 156 in Texas.

HORSFORD'S ACID PHOSPHATE.

Admirable Results in Fevers.
Dr. J. J. RYAN, St. Louis, Mo., says: "I invariably prescribe it in fevers; also in convalescence from wasting and debilitating diseases, with admirable results. I also find it a tonic to an enfeebled condition of the genital organs."

Time is money, and the outlay for a box of Esterbrook's Pens is both time and money saved. All stationers keep them.

PRICKLY ASH BITTERS is an unfailing specific for all complaints arising from a derangement of the functions of the liver. It purifies the blood and infuses new life into the invalid. Pains in the side, general uneasiness, loss of appetite, headache, bilious attacks, &c., &c., are sure indications that a corrective is needed. PRICKLY ASH BITTERS is especially adapted for these complaints. It arouses a torpid liver to action and restores it to a healthy condition.

As one having used Ely's Cream Balm I would say it is worth its weight in gold as a cure for Catarrh. One bottle cured me.—S. A. LOVELL, Franklin, Pa. (See adv't.)

ON THE RIGHT TRACK.

OUR teachers seem to be getting hold of the real value of this Journal and the splendid premium we send postpaid to every subscriber.

Here is an interesting letter bearing upon these topics and others of equal interest:

SMITHSVILLE, MO., Nov. 21, '84.

J. B. MERWIN, Managing Editor
AMERICAN JOURNAL OF EDUCATION:

Sir:—I have received the Encyclopedia given with the JOURNAL as premium, and consider it as a valuable accession to my list of books. I have long been in want of just such a book, but have never felt able to secure it until your splendid offer placed it within easy reach, and I at once availed myself of the opportunity. I would not be without it for five times its cost. I am anxious to place both the JOURNAL and the encyclopedia in every family in my school district.

Our Teachers are holding Township Institutes in this (Clay) county monthly, and we find them very profitable, more especially to the teachers. We are enabled to do better work in our schools, and not only that, but secure more aid from our patrons. So far they have proven to be highly interesting to teachers, school officers, parents and children. Clay county schools, as a general thing, rank with the best in the State. Our teachers are wide-awake and fully up to the standard of progress. Clay has been one of the few counties in Missouri that has kept pace with the progress of school methods, and have thus, by her normal institutes placed herself on an equal footing with the very best of school systems.

These Township Institutes should not be under-estimated and their importance both to the teacher and parent is of great moment. They will be the means of bringing parents, school officers and teachers into closer union. They are the means of enabling School Boards to make better selections of teachers; for, as a rule, our best teachers are the ones who attend these institutes, and our School Boards have not failed to make this discovery, and hence have profited by it. We would suggest to those counties where such Institutes are not held, that they at once organize and enter into the work, and rely upon it both parents and teachers will be materially benefited. You will reap the reward of better schools and thus secure better teaching for your pupils.

Respectfully,
JOHN F. JUSTUS.

It certainly can do no harm to prick some of the bubbles in the scheme for "Half-time schools," as set forth in an article in a late number of the *North American Review*. Prof. C. M. Woodward, of the Manual Training School of Washington University, seems fully equal to the emergency.

Teachers wanting positions, send for "The Educational World," Address "Modern Teacher's Supply Company," Logansport, Indiana.

The South Florida Orange Grove,
\$1 per year, and 10c. silver for sample. Four
Acres Orange Grove. Payment on time.
17h-18g J. CROSS, Liverpool, Fla.

Brockway Teachers' Agency,
TIMES BUILDING, CHICAGO.

Supplies teachers for all departments of Educational work. Teachers send stamp for circular.
16-11f

66 DOLLARS a week in your own town Terms and 36 outfit free. Address H. HALLET Co., Portland, Maine.

JUST OUT!—
ORATORICAL! DRAMATIC! PATHETIC! HUMOROUS!
THE ELOCUTIONIST'S ANNUAL, NO. 12.

Readings! Recitations! Dialogues! Tableaux!
Contains the latest and best productions of the Most Popular English and American Writers of To Day, together with some of the Choicest Selections of Standard Literature. Sold by all Booksellers and Newsdealers, or will be sent, postpaid, upon receipt of price. 200 pages; Paper Binding, 25c.; Cloth, 60c.

SPECIAL OFFER:—The full set of the series, 12 numbers, will be sent upon receipt of \$3.00.

THE NATIONAL SCHOOL OF ELOCUTION AND ORATORY,
Publication Department, C. C. SHOEMAKER, Manager. | 1416 & 1418 Chestnut St., Philadelphia.
17-11-11



For Fine Writing No. 1,303, and Ladies 170. For Broad Writing 294, 389, and Stub Point, 849. For General Writing, 332, 404, 390, and Falcon, 878, 908.

Other Styles to Suit All Hands.

Sample Cards, Price Lists, Etc., furnished on application.

Joseph Gillott & Sons, 91 John St., N. Y. Henry Hoe, Sole Agent.

YOUR FAVORITE POET FREE!

To any person who will send us information of a vacancy where we can supply a Teacher, we will send FREE any of the following great poetical works, beautifully printed and handsomely bound:

Aurora Leigh,
Mrs. Browning,
Robert Browning,
Burns,
Byron,
Chaucer,
Coleridge,
Eliza Cook,
Cowper,
Crabbe,
Dante,

Favorite Poems,
Faust,
Goethe's Poems,
Goldsmith,
Hemans,
Herbert,
Hood,
Iliad,
Jean Ingelow,
Keats,

Lady of the Lake,
Lucile,
Owen Meredith,
Milton,
Moore,
Odyssey,
Ossian,
Pilgrim's Progress,
Poetry of Flowers,
Procter,
Sacred Poems,

Schiller,
Scott,
Shakespeare,
Shelley,
Spenser,
Tennyson,
Thomson,
Virgil,
Kirk White,
Wordsworth,

We also supply any Book or Periodical at remarkably low rates.

AMERICAN TEACHER'S BUREAU, 914 Olive St., St. Louis, Mo.

MRS. DR. L. K. SHAW'S
Celebrated Moth and Freckle Lotion.

Differs from all other. (No artificial devices. Not injurious.) Removes Freckles, Moth Patches, Sallowness, Tan, &c., in ten days. (Does not cover up defects.) Cures Pimples, Blackheads, Flesh Worms, Salt Rheum, Ring Worm, Rough Skin or faulty Complexion of every nature, removes all obstructions to the pores, restores healthy action to the skin, softens and whitens it beautifully clear and very youthful. (Nothing can equal it.) Removes and prevents premature wrinkles. Over 30 years success fully used in private practice. Endorsed by high medical authority as a perfect Natural Purifier and Beautifier of the Complexion. Free from every ingredient prejudicial to the health or skin. Price 3¢ by druggists, or sent to any address. "Worth ten times the price," thousands have said. You will say so. Try it. Send for circular and valuable Toilet information FREE.

Address, MRS. DR. L. K. SHAW,

115 Fulton Street, New York.

17-d k

Teachers Wanted!

To sell our grand, new book, *The World's Wonders, as Seen by the Tropical and Polar Explorers*, with an account of the *Greeley Expedition, and its Disastrous Results*. ANYBODY can sell it. EVERYBODY will buy it. Agents make 100 per cent. selling our pictorial, family Bibles. Write for terms and circulars. Address

South Western Methodist,

713 Chestnut Street, ST. LOUIS, MISSOURI.

The Educational Weekly!

Is the only Weekly Educational Journal in the West. It embodies the best thought of American Educators, and furnishes PRACTICAL INSTRUCTION to the progressive Teacher. Sample copy free. 17-7-6 J. M. OLCOTT & CO., Publishers, Indianapolis, Ind.



Cards Sample Book, Premium List, Price List sent free. U. S. CARD CO., Centerbrook, Conn. 17C-1

A PRIZE! Send six cents for postage, and receive free, a costly box of goods, which will help all, of either sex, to more money right away than anything else in this world. Fortunes await the workers absolutely sure. At once address TRUE & Co. Augusta Maine. 17-21y

NEW! A Measuring Attachment in lines of Gold put upon any Sewing Machine Table. Only 10c. Useful, durable and ornamental. Free by mail. Agents Wanted. EDW. P. FORBES, Patentee, Hartford, Conn. 19 C-18-N

SHORTHAND thoroughly taught by mail. Graduates assisted to positions. Circulars free. Address, A. N. Gachler, p. o. box 404, St. Louis, Mo. 17-12-15-5

RECENT LITERATURE.

THE NUTSHELL SERIES. A gathering of the best thoughts of the best writers. Edited by Ellen Kendrick Johnson, and arranged under the following heads: Wisdom, Philosophy, Sentiment, Epigrams and Epitaphs, Proverbs, Wit and Humor. Six volumes, oblong 32mo, uniquely printed. "I could be bounded in a nutshell,"—*Hamlet*.

These "nutshells" are full of the choicest meats. When you open them, the dainty, beautiful volumes, bound in old gold cover, you will most earnestly thank the gifted editor, Ellen Kendrick Johnson, for her most careful search, and successful finding of so much of real and permanent value. All writings of all times have been laid under contribution, all, that is, save Shakespeare and the Bible, from which says the editor, "It was easier not to draw at all, than only to slip." This library of six volumes, says *The Literary World*, engages the eye at once by the novelty of its plan and look, by its mechanical beauty and delicacy, and by its refined excellence as a body of thoughts. "How pretty!" every one will say on looking at the outside; "how good!" every one will add on examining what is within.

Icaria: A Chapter in the History of Communism. By Albert Shaw, Ph.D. [G. P. Putnam's Sons, New York.

The careful, pains-taking effort, to collate and state the facts in regard to the theories and practical working and disastrous outcome of "communism" in America, can but do great good at the present time. This is a book that ought to go into the school library, and be read by the people.

The struggle to found a "community" in Nauvoo, Ill., in Cheltenham, just outside of St. Louis, in Iowa, in Texas, and now lately in Icaria, Speranza, California, by Etienne Cabet, furnish a remarkable example of the self-sacrificing purpose of this noble, but misguided leader, as well as the utter impracticability of the communistic idea in America.

It is an important contribution to the literature of social science.

Prof. Shaw is connected with the John Hopkins University in Baltimore, and these papers form a part of the results of his work on political economy.

L. Prang & Co., of Boston, send us a package of their exquisite Christmas and New Years cards. In design, color and finish they deservedly take the high-at rank, and their effort to bring within the reach of all such gems of beauty, is most commendable. They are educators as well as benefactors.

Of the four elegant "calendars" for 1885, issued by Houghton, Mifflin & Co., the *Literary World* speaks as follows:

Mr. Longfellow's vignette rests quietly under the protecting hand of the Goddess of Poetry, about to receive therefrom the wreath of laurel. Mr. Emerson looks forth benignly from a cluster of the branches of his Concord pines. Mr. Whittier is escorted by full length figures of Maud Muller and Mable Martin. And Dr. Holmes is attended by a bevy of Beacon street maidens, in very-early-in-the-morning costumes, bringing festoons of roses surreptitiously gathered from the Public Garden. What a wealth of sentiment and culture there is though, in these three hundred and sixty five quotations from each author.

From "Greenland's Icy Mountains." By Reginald Heber. Illus. Porter

& Coates. "Lady Clare." By Alfred Tennyson. Illus. Porter & Coates.

These publishers add this season two beautiful books to the series commenced sometime since. Bishop Heber's grand old missionary hymn, *From Greenland's Icy Mountains*, is embellished with twenty-one illustrations by Frederick B. Schell, in which the sunny fountains of Africa, the coral strands of India, and Greenland's Icy Mountains are reproduced with all the vividness characteristic of this clever artist's work. They have been finely engraved under the supervision of James W. Lauderbach. Mr. Schell, in co-operation with Alfred Fredericks, Granville Perkins, F. S. Church, Harry Fenn and Edmund P. Garrett, has illustrated Tennyson's charming love poem *Lady Clare* for this same series. Like the preceding book, it is an exquisite example of the printer's and engraver's art, of luxurious paper and original bindings. Both are issued in cloth, extra (1.50), satin.

The January number of the *North American Review* is an excellent one. Under the title the "Reunited South," Henry Watterson presents with great clearness the Southern and Democratic view of the political situation as it now stands. This is interesting to every citizen whether he agrees with Mr. Watterson or not. But the literary reader will first turn to Frederick Harrison's brilliant and incisive discussion of "Froude's Life of Carlyle." Mr. Mulhall's paper on "The Increase of Wealth" is a successful endeavor to render large masses of figures popularly intelligible.

The typography, illustrations, and general qualities of *Our Little Ones* make it a superior book of its class. The volume is the bound collection of the numbers of the monthly magazine whose name it bears, the contents of which adapt it to the youngest grade of readers. Practically it is the old *Nursery* in a new form. "Oliver Optic" is the editor, Boston. [Estes & Lauriat.

The *Art Interchange* of December 4, 1884, has, as a double page supplement, one of the most exquisite studies in color ever published, entitled the "Lute Player." It shows the full length figure of a beautiful girl, with a lute in her hand, standing against a background of forest trees. The coloring is strong and brilliant, and the drawing is exceptionally good. The picture is well worth a frame. The notes, queries and answers department (a most valuable feature of this journal) contains information about painting in water colors, what is meant by painting "loosely," the use of varnish and turpentine, use of mediums, how to learn to draw, &c., &c. This very full and interesting copy of the *Art Interchange* can be had by enclosing 15 cents in stamps to William Whitlock, publisher, 140 Nassau Street, New York.

Catarrh.

A NEW treatment has been discovered whereby a permanent cure of this hitherto incurable disease, is absolutely effected in from one to three applications, no matter whether standing one year or forty years. This remedy is only applied once in twelve days, and does not interfere with business. Descriptive pamphlet sent free on receipt of stamp, by A. H. Dixon & Son, 305 King street west, Toronto, Canada.

HORSFORD'S ACID PHOSPHATE. Well Pleased.

Dr. C. ROBERTS, Winchester, Ill., says: "I have used it with entire satisfaction in cases of debility from age or overwork, and in inebrates and dyspeptics, and am well pleased with its effects."

WASHINGTON UNIVERSITY

Of St. Louis,

COMPRISE THE FOLLOWING DEPARTMENTS:

- I. SMITH ACADEMY: DENHAM ARNOLD, Principal. A Preparatory School, for College, Polytechnic, School and Business.
- II. MANUAL TRAINING SCHOOL: C. M. WOODWARD, Director. This is a School for Boys not less than Fourteen Years Old. The Course of instruction runs through Three Years. Branches Taught are Mathematics, History, Physics, English Language and Literature, Latin, French, Drawing, and the Use of Tools; the last named includes Carpentry, Pattern-Making, Blacksmithing, Machine-Work, and the management of the Engine.
- III. MARY INSTITUTE: C. S. FENNELL, Principal. A Completely Equipped School for Girls and young Ladies. Enrollment, 400 pupils.
- IV. THE COLLEGE: M. S. SNOW, Dean. DEGREES.—I. Bachelor of Arts. II. Bachelor of Philosophy. III. Master of Arts. IV. Doctor of Philosophy.
- V. POLYTECHNIC SCHOOL: C. M. WOODWARD, Dean. DEGREES.—I. Civil Engineer. II. Mechanical Engineer. III. Chemist. IV. Engineer of Mines. V. Architect. VI. Master of Science. VII. Doctor of Philosophy.
- VI. ST. LOUIS SCHOOL OF FINE ARTS: HALSEY C. IVES, Director.
- VII. ST. LOUIS LAW SCHOOL: W. G. HAMMOND, LL. D., Dean.

In the Undergraduate Departments, comprising the College and Polytechnic School, all facilities for the best education, Library, Apparatus, Laboratories, Assay Rooms, Gymnasium, &c., are adequately supplied. All undergraduates have free admission to work-shop instruction in Manual Training School.

Good board, with lodging, including fire and light, can be obtained at convenient places for \$20 per month and upward.

For conditions of admission, or further information, apply to the officers named above.
J. 17-1 ly. W. G. ELIOT, Chancellor.

Missouri School of Mines,
ROLLA, MISSOURI.

The courses of study lead to the degrees of Civil and Mining Engineer, and embrace in three years among the most prominent, the following:

Civil Engineering: Use of Instruments, Land and Railroad Surveying, Triangulation, Road Construction, Actual Practice in the Field.

Mine Engineering: Exploration of Mineral Veins, Timbering, Ore Concentration.

Mathematics: Algebra, Geometry, Trigonometry, General Geometry, the Infinitesimal Calculus with their numerous applications.

Mechanics: Rational and applied.

Chemistry and Metallurgy: Theoretical Chemistry, Blowpipe Analysis, Qualitative and Quantitative Analysis; Metallurgy by lectures. The Chemical and Assay Laboratories are well equipped.

Graphics: Descriptive Geometry, Shades Shadows and Perspective; an extended course in Drawing.

Preparatory Department.—Thorough Course of Two Years, completion of which admits to Professional Courses without further examination.

Tuition, 20 dollars per year. Board, 10 to 15 dollars per month.

FALL TERM BEGINS SEPTEMBER 15th, 1884.

For information apply to

G. Z. WHITNEY, Sec'y.

F 17-2.

CHARLES E. WAIT,
Director.

The Hershey School of Musical Art,
CHICAGO, ILLINOIS,

Affords unsurpassed facilities for Musical Education in every department of the art. Special facilities for Concert performers.

Pupils can enter at any time.

Send for circular with full particulars.

CLARENCE EDDY, General Director.

Mrs. SARA HERSHEY EDDY, Vocal Director.

Hershey Music Hall, Chicago, Ill.

17-11-15-4

STATE NORMAL SCHOOL,

SECOND DISTRICT,

WARRENSBURG, MO.

A School for the Professional Training of Teachers.

Over 500 Students in Attendance Last Year.

COURSES OF INSTRUCTION.

I. AN ELEMENTARY COURSE for teachers of District Schools.

II. AN ADVANCED COURSE for teachers of Graded Schools.

III. A PROFESSIONAL COURSE for Graduates of Colleges and Seminaries.

IV. A POST GRADUATE COURSE for experienced teachers who have completed the Advanced Course in this, or its equivalent in some other, school of equal rank.

Expenses are moderate. Fifteenth Annual Session opens SEPTEMBER 3, 1884.

For Full Information, Address

GEO. L. OSBORNE, Pres.

WOMAN'S MEDICAL COLLEGE
OF CHICAGO.

The annual session commences about the first Tuesday in October, and continues thirty-on weeks.

The requirements for admission, the course of study, and the requirements for graduation fully equal to contiguous colleges.

Prof. Wm. H. Byford, A. M., M. D., Pres't.

For information or announcement, address Prof. David W. Graham, M. D., Sec'y.

17-3-3ly

SHEFFIELD SCIENTIFIC SCHOOL
OF YALE COLLEGE.

Courses in Chemistry, Pure and Applied, in Civil and Dynamic Engineering, in Agriculture, Botany, Zoology, Mineralogy, and Geology, in Biology, with special reference to preparation for a Medical Course, and in General Scientific Studies, with English, French, and German, Political Economy, History, etc.

For programme, address Prof. Geo. J. BRUSH, Executive Officer, New Haven, Conn. 17-J-6-11

ILLINOIS STATE NORMAL UNIVERSITY,

For the special preparation of teachers. The full Course of Study requires three years. Tuition free to those who pledge themselves to teach in the State; to others, \$30 per year. High School Department offers the best advantages for preparing for college or for business. Tuition \$30 per year. Grammar School Department furnishes excellent facilities for obtaining a good, practical education. Tuition \$35 per year. Terms begin January 5, 1885, and April 6, 1885. For particulars, address EDWIN C. HEWETT, President, Normal, Ill. 17-c-11

ST. LOUIS SCHOOL.

MUSEUM OF FINE ARTS,

ART DEPARTMENT WASHINGTON UNIVERSITY,

The School is fully equipped with working material, and furnishes instructions in Drawing, Modeling, Painting, perspective and decorative Design.

Next term begins, Monday, Oct. 6, '84. Students may enter at any time.
17-j 1-ly HALSEY C. IVES, Director.

Best Teachers, AMERICAN and FOREIGN,

promptly provided for Families, Schools, College. Skilled Teachers supplied with Positions. Circulars of Good Schools free to Parents.

School Property rented and sold. School and Kindergarten Material, etc.

J. W. SCHERMERHORN & CO., American School Institute, 7 East 14th St., N. Y.

17-a-4ly

Littell's Living Age.



THE LIVING AGE has been published for more than forty years, and has met with continuous commendation and success. A WEEKLY MAGAZINE, it gives fifty-two numbers of sixty-four pages each, or more than three and a quarter thousand double-column octavo pages of reading matter yearly. It presents in an inexpensive form, considering its amount of matter, and with a combined freshness and completeness nowhere else attempted.

The best Essays, Criticisms, Serial and Short Stories, Sketches of Travel and Discovery, Poetry, Scientific, Biographical, Historical and Political Information, from the entire body of Foreign Periodical Literature, and from the pens of the

FOREMOST LIVING WRITERS.

The ablest and most cultivated intellects, in every department of Literature, Science, Politics, and Art, find expression in the periodical literature of Europe, and especially of Great Britain.

THE LIVING AGE, forming four large volumes a year, furnishes, from the great and generally inaccessible mass of this literature, the only compilation that, while within the reach of all, is satisfactory in the COMPLETENESS with which it embraces whatever is of immediate interest, or of solid, permanent value.

It is therefore indispensable to every one who wishes to keep pace with the events or intellectual progress of the time, or to cultivate in himself or his family general intelligence and literary taste.

OPINIONS.

"Nearly the whole world of authors and writers appear in THE LIVING AGE in their best moods. Art, science and literature find fresh and eloquent expression in its pages from the pens of the best writers of the day; and the reader is kept well abreast of the current thought of the age."—Boston Journal.

"It has now for many years held the first place of all our serial publications. The only possible objection that could be urged to it is the immense amount of reading it gives. There is nothing noteworthy in science, art, literature, biography, philosophy or religion that cannot be found in it. Its readers are supplied with the best literature of the day."—The Churchman, New York.

"It has long been one of the most attractive literary companions of the time, and it may be truthfully and cordially said that it never offers a dry or valueless page."—New York Tribune.

"Biography, fiction, science, criticism, history, poetry, travel, whatever men are interested in, all are found here; and it is truly a panoramic exhibition of the Living Age. It furnishes more for the money it costs than any other periodical within our knowledge."—The Watchman, Boston.

"With each revolving year it increases in value. No other periodical gives so diversified a view of current literature."—Presbyterian Banner, Pittsburgh.

"There is nothing like it."—Christian at Work, N. Y.

"It has for us an interest and value beyond those of any other publication. Coming once a week, it gives, while yet fresh, the productions of the foremost writers of the day."—Montreal Gazette.

"Through its pages alone, it is possible to be as well informed in current literature as by the perusal of a long list of monthlies."—Philadelphia Inquirer.

"It enables the reader to keep pace with the best thought and literary work of our time."—Christian Union, New York.

"Foremost of the eclectic periodicals."—N. Y. World.

"It furnishes a complete compilation of an indispensable literature."—Chicago Evening Journal.

"It saves not only time, but money."—Pacific Churchman, San Francisco.

"It has become indispensable."—N. Y. Observer.

"It still keeps to the front as the best of all magazines. It limited to but one publication, we would infinitely prefer THE LIVING AGE to all others. It stands alone in its excellence."—Morning Star, Wilmington, N. C.

"It is one of the marvels of the age."—Spectator, Hamilton, Canada.

Published WEEKLY at \$3.00 a year, free of postage.

Club Prices for the Best Home and Foreign Literature.

"Possessed of THE LIVING AGE and one or other of our various American monthlies, a subscriber will find himself in command of the whole situation."—Phila. Evening Bulletin.

For \$10.50, THE LIVING AGE and any one of the American \$4.00 monthlies (or *Harper's Weekly* or *Bazar*) will be sent for a year, postpaid: or, for \$20.00, THE LIVING AGE and the *St. Nicholas* or *Lippincott's Monthly*. Address,

LITTELL & CO., BOSTON.

THE SOUTHERN SANITARIUM.

Formerly known as the "Atlanta Water Cure," offers inducements and advantages for the Sick to come and get well, possessed by no other Hygienic Institution in the country. Atlanta is justly considered the "Mecca of the South"—and with its invigorating climate and the superior modern Therapeutics—as practiced at this Sanitarium—no invalid, whether from the North or the extreme South, need fall of being restored to health, unless suffering with organic lesion; and even then he can, under our methods of treatment, have his days indefinitely prolonged. In conjunction with usual approved remedial agents, we employ the celebrated Mollers Thermo-Electric Bath, or Improved Turkish, Russian, Roman and Electric Vapor Bath, and some twenty different kinds of Electric Water Baths, etc. Also Massage treatment—Swedish Movement, by Machinery and Manual Operations by trained manipulators—Health-Lift and other Apparatus. Special attention given to Diseases of Invalid Ladies, and Dyspepsia, Neuralgia, Rheumatism, and Diseases of the Kidneys, Liver and Lungs. For particulars, address U. O. ROBERTSON, Atlanta, Ga.

LOSS AND GAIN.

CHAPTER I.

"I was taken sick a year ago
With bilious fever."

"My doctor pronounced me cured,
but I got sick again, with terrible pains
in my back and sides, and I got so bad I
Could not move!

I shrunk!
From 228 lbs. to 120! I had been
doctoring for my liver, but it did me
no good. I did not expect to live
more than three months. I began to
use Hop Bitters. Directly my appetite
returned, my pains left me, my entire
system seemed renewed as if by magic,
and after using several bottles, I am
not only as sound as a sovereign, but
weigh more than I did before. To
Hop Bitters I owe my life."

R. FITZPATRICK.

Dublin, June 6, '81.

CHAPTER II.

"Malden Mass., Feb. 1, '80. Gentlemen:
I suffered with attacks of sick headache,
Neuralgia, female trouble, for years
in the most terrible and excruciating
manner. No medicine or doctor could
give me relief or cure, until I used
Hop Bitters.

"The first bottle
Nearly cured me;"

The second made me as well and
strong as when a child,

"And I've been so to this day."

My husband was an invalid for
twenty years with a serious

"Kidney, liver and urinary complaint

"Pronounced by Boston's best physicians—

"Incurable!"

Seven bottles of your Bitters cured
him, and I know of the

"Lives of eight persons"

In my neighborhood that have been
saved by your Bitters,

And many more are using them
with great benefit.

"They almost
Do miracles?" Mrs. E. D. Slack.

How TO GET SICK.—Expose yourself day and
night; eat too much without exercise. work too
hard without rest; doctor all the time; take all
the vile nostrums advertised; and then you will
want to know how to get well, which is answered
in three words—Take Hop Bitters!

None genuine without a bunch of green
Hops on the white label. Shun all the vile, poison-
ous stuff with "Hop" or "Hops" in their name.

THE SONG FRIEND closes its fifth
year with the December issue, and,
judging from its able articles on musical
topics and its beautiful new music,
it is destined to be popular among all
musical people for many years to
come. "Practical Suggestions in Refer-
ence to Singing" is the first of a series
of editorials that promise to be
very instructive to vocal students
and teachers. "How to Practice," by
the celebrated pianist and teacher,
Miss Amy Fay, should be read by all
piano pupils, and no doubt teachers
would be benefited by a perusal of
it. Dr. J. M. Stillman has contributed
a new Christmas anthem that will
doubtless be largely utilized by choirs
as it is very beautiful and not difficult.

Mr. S. W. Straub has in this issue his
latest song and chorus, "When We
Met," which is in this popular author's
best vein. We cheerfully recommend
this live musical journal to our musical
people. The publisher makes
the liberal offer of "three months
free" to new subscribers. Subscription
price, \$1.00. Sample copy, 10 cts.

Address S. W. Straub, Publisher, 236
State St., Chicago, Ill.

DR. J. L. CURRY says, "the evils of
ignorant voting cannot be exagger-
ated. Four Presidents in succession
with increasing emphasis, have in-
vited the attention of Congress to
legislation on the subject. State Leg-
islatures, educational conventions,
religious assemblages, public press
and private citizens swell the demand
for immediate and effective measures
of relief by national aid to establish
and maintain schools."

LITTELL'S LIVING AGE. The number
of the *Living Age* for 20th of De-
cember contains:—Mr. Gladstone,
Fortnightly Review; An Artist's Au-
tobiography, *Blackwood*; Goethe, part
III, *Contemporary Review*; The Mem-
oirs of Madame de Tournel, *National
Review*; Barbados, *Macmillan*; The
Death of Mr. Fawcett, *Times*; Mr.
Fawcett's Heroism, *Spectator*; A
Chapter of Blunders, *All the Year
Round*; Aristotle's History of Ani-
mals, *Edinburgh Review*; Borough-
dale of Borroughdale, *Macmillan*;
Among the Trappists, *Good Words*;
Karlsbad, the Queen of Bohemian
Watering-Places, *Nineteenth Century*;
Curiosities of the Bank of England,
Chambers' Journal; Edmund Yates,
Athenaeum; A Solitary Island, *Cham-
bers' Journal*; with instalments of
"At Any Cost," and poetry. A new
volume begins Jan. 1st. For \$8 we
send both the AMERICAN JOURNAL
OF EDUCATION and *The Living Age*
for 1885, postpaid, or fifty-two num-
bers of sixty-four large pages each,
more than 3,800 pages a year, and
for \$10.50 the publishers offer to send
any one of the American \$4 monthlies
or weeklies with the *Living Age* for
a year, both postpaid. Littell & Co.,
Boston, are the publishers.

The Light that is Felt.

A tender child of summers three,
Seeking her little bed at night,
Paused on the dark stair timidly,
"Oh, Mother! Take my hand," said she,
"And then the dark will all be light."

We older children grope our way
From dark behind to dark before;
And only when our hands we lay,
Dear Lord, in Thine, the night is day
And there is darkness nevermore.

Reach downward to the sunless days
When our guides are hid as we,
And faith is small and hope delays;
Take Thou the hands of prayer we raise,
And let us feel the light of Thee!
—JOHN G. WHITTIER, in the *Christmas St. Nicholas*.

GRAMMAR and Analysis made easy
and Attractive, by Diagrams. F. V.
Irish, Author and Publisher, Lima,
Allen county, Ohio.

"That which strikes the eye lives long upon the
mind;

The faithful sight engraves the knowledge with a
beam of light."

This, as applied to grammatical re-
lations represented by diagrams, is
very true. And while some teachers
abuse or overuse the means, not see-
ing the end to be accomplished, the
result should not be charged to dia-
grams, which, properly used, are the
only means for understanding the
very abstract relations of the science.
Prof. Irish has given us a very com-
plete work on diagramming, and we
take pleasure in recommending it to
all teachers and students interested.

GINN, HEATH & Co. seem bound to
supply freely and promptly, the best
things in the way of books or tools for
teachers and pupils; they send a
"Hand-Book of Latin Synonyms." By
Edgar S. Shumway, A. M. Price 30c.
A "Manual of Gymnastic Exercises." By
Edward Hitchcock, Amherst Col-
lege. Price 30c. "Wentworth and
Hill's Manuals." No. III. Geometry.
Price 80c. "Addition Manual." By
F. B. Ginn, of Ginn, Heath & Co.
Price 20c. "Sophocles Antigone." Edited
on the basis of Wolf's edition.
By Martin L. D'Ooge. Price
\$1.00. All in good type and good
binding.

The centre of population in the
United States is steadily moving
westward. The Esterbrook Steel
Pens are moving steadily in every di-
rection.

HORSFORD'S ACID PHOSPHATE.
Marked Benefit in Indigestion.

Dr. A. L. HALL, Fair Haven, N. Y.,
says: "Have prescribed it with
marked benefit in indigestion and uri-
nary troubles."

A Safeguard.

The fatal rapidity with which slight
Colds and Coughs frequently develop
into the gravest maladies of the throat
and lungs, is a consideration which should
impel every prudent person to keep at
hand, as a household remedy, a bottle of
AYER'S CHERRY PECTORAL.

Nothing else gives such immediate relief
and works so sure a cure in all affections
of this class. That eminent physician,
Prof. F. Sweetzer, of the Maine Medical
School, Brunswick, Me., says:—

"Medical science has produced no other an-
odyne expectorant so good as AYER'S CHERRY
PECTORAL. It is invaluable for diseases of the
throat and lungs."

The same opinion is expressed by the
well-known Dr. L. J. Addison, of Chicago,
Ill., who says:—

"I have never found, in thirty-five years of
continuous study and practice of medicine, any
preparation of so great value as AYER'S CHERRY
PECTORAL, for treatment of diseases of the
throat and lungs. It not only breaks up colds
and cures severe coughs, but is more effective
than anything else in relieving even the most
serious bronchial and pulmonary affections."

AYER'S Cherry Pectoral

Is not a new claimant for popular con-
fidence, but a medicine which is to-day
saving the lives of the third generation
who have come into being since it was
first offered to the public.

There is not a household in which this
invaluable remedy has once been in-
troduced where its use has ever been
abandoned, and there is not a person
who has ever given it a proper trial
for any throat or lung disease suscep-
tible of cure, who has not been made
well by it.

AYER'S CHERRY PECTORAL has,
in numberless instances, cured obstinate
cases of chronic Bronchitis, Laryngitis,
and even acute Pneumonia, and has
saved many patients in the earlier stages
of Pulmonary Consumption. It is a
medicine that only requires to be taken in
small doses, is pleasant to the taste, and is
needed in every house where there are
children, as there is nothing so good as
AYER'S CHERRY PECTORAL for treat-
ment of Croup and Whooping Cough.

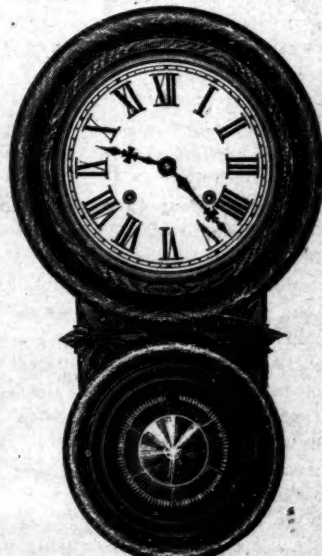
These are all plain facts, which can be
verified by anybody, and should be re-
membered by everybody.

Ayer's Cherry Pectoral

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.

Sold by all druggists.



FOR SALE BY

427 School Furnishing Co's, Jewelers, 228

And by the Manufacturers,

NEW HAVEN CLOCK CO.,

31 Washington St., Chicago,

\$5 to \$20 per day at home. Samples worth
\$5 free. Address STRINSON & CO.,
Portland, Maine.

\$10.00 in Confederate script, and 24 page stamp
and coin catalogue, 10 cents.

W. F. GREARY, 87 Branson St., San Francisco,
Cal. 17-C-18-B

MAP DRAWING.

PUPILS like to draw maps. These maps are generally copies of maps found in the books and are prepared with little or no thought of the appearance of the countries represented. Let each pupil draw a large map of the United States with the outlines of the States. In each State write a short description of its characteristics. If the pupils possess considerable artistic ability let them draw outline maps and in the outlines draw pictures of the leading productions. In all map drawing work, be sure that the child looks through the map to the country. Let him see the rivers, lakes, factories and cotton fields. Let the people, animals, trees and divisions of land and water be pictured vividly before him. The making of maps is not an object of study, but should be an aid in the study of geography.

FAST TIME TO WASHINGTON

THE Ohio & Mississippi railway has recently shortened its time to Washington and Baltimore nearly two hours, and at the same time inaugurated a double daily sleeping car service between St. Louis and the national capital, which places it far ahead of all competitors both in time and accommodations. Solid trains with day coach, baggage cars and palace sleepers are the special features of the new departure. The limited express with through day and sleeping cars leaves St. Louis at 8 A. M. daily, and arrives at Washington 12:15 P. M. next day, a run of 28 hours—five hours quicker than the best time by any other line. The night express with through sleepers leaves St. Louis at 7 P. M. daily, and arrives in Washington at 8 A. M., and Baltimore 7 A. M. second morning. Twenty-eight hours to Washington is something new, and the traveling public will not be slow to appreciate it, especially as there is no extra charge for riding on the "limited."

THE St. Louis School Board received \$958,090.04 during the fiscal year ending July 31, 1884, and begins this year with a balance of \$154,310.10 of which \$109,468.15 belongs to the permanent fund. The expenditures for teachers' salaries were \$632,973, officers, \$26,600.40 and janitors \$63,090.

TO THE WORLD'S FAIR.

It is well that the traveling public should understand that the Cairo Short Line is the only line running double daily trains with through coaches and Pullman Palace Sleeping Cars between St. Louis and New Orleans without change. Through trains leave St. Louis Union Depot at 2:30 and 8:50 p. m., making the unequalled time of fourteen hours to Memphis, eighteen hours to Nashville and thirty hours to Mobile and New Orleans. Ticket office 104 North Fourth street and at Union Depot.

THE national debt of the United States in 1865 was \$2,381,530,294 and since then it has been reduced to \$1,220,000,000, that amount remaining due last August.

PROF. S. W. SMITH, of Saltville, Miss., says: "I find Merwin's Aids to school discipline work like a charm with my pupils. Please send more for the enclosed—"

S. W. S.

TEACHERS' BOOKS.

OUR OWN PUBLICATIONS.

One Thousand Ways of One Thousand Teachers	\$1.00
Wedgwood's Topical Analysis	.50
Grube's Method of Teaching Primary Arithmetic	.30
Hennequin's Questions on the French Grammar	.25
Latin in the Public Schools	.15
Rules and Hints on Theory and Practice of Teaching	.10
Three Beautiful Songs for Ladies' Voices	.10
Graded School Songs, Primary, Intermediate, Grammar and High School, each book	.10
Graded Language Exercises, three parts, each	.10
A Rhyme of the District School	.15
Primary Fridays, new and enlarged edition	.25
Lessons on Color for Primary Schools	.30
Bouquet of Song, in the Tonic Sol fa Notation	.25
Dime Question Books, all subjects, each	.10
The Tonic Sol-fa Music Course, five books, each	.15
Teachers' Manual for Tonic Sol-fa Music Course, with Rote Songs	.40
The Step Modulator, 30 in x 54 in	.25
Outlines of Map Drawing	.30

It S. R. WINCHELU & CO., Chicago.

SITUATIONS FREE

To our subscribers only—can be obtained through the School Bureau department of the

Chicago Correspondence University.

An institution furnishing instruction to "any person in any study."

THROUGH DIRECT CORRESPONDENCE WITH EMINENT SPECIALISTS (College Professors). To learn of present courses of study and vacancies to teach, send to cents for sample copy of our first-class Literary and Educational Journal.

N. B.—Schools and families supplied with teachers FREE. Address
The Correspondence University Journal,
(Agents Wanted.) 165 LaSalle St., Chicago.
18-1-11

FREE TO LADIES ONLY.

To introduce "Happy Days," our new 16p. Illus'd Magazine, we send free to any lady sending 5c. in stamps for 3 months subscription. 5 Ladies' Large Size Waterproof Gossamer Garments with catalogue of other rubber goods, provided they show them to their friends and endeavor to induce other sales. One cent stamps preferred. Pub. Happy Days, Hartford, Conn.
18-1-11

Rohrer's Bookkeeping.

The most complete system extant, and at prices below any other series.

N. B. Special terms made for introduction.

PRICES.

Primary\$.50
Lectures1.00
Common School Edition1.50
Counting House Edition3.00
Key2.00

A sample copy of either book for examination, will be sent by mail on receipt of half price—or the five books for \$3.50.

The five books sent to teachers for examination for \$3.50, but only in reply to requests accompanied by the money.

GILBERT BOOK Co., Publishers.
205 N. Fourth Street, St. Louis, Mo. 17-J-11

REWARD! Of \$10—\$50 to every person sending us valuable information of school vacancies and needs. No trouble or expense. Send stamp for circulars to

CHICAGO SCHOOL AGENCY

185 South Clark Street, CHICAGO, ILL.

N. B. We want all kinds of Teachers for Schools and Families. M. 17-3 ly.

\$72 A WEEK. \$15 a day at home easily made. Costly outfit free. Address TRUX & Co., Augusta, Maine.

Southern School Agency,

Established 1880.

Procures Competent Teachers for schools and families without charge. Supplies Teachers seeking positions with suitable places at small cost. Rents and sells school property and all kinds of school appliances. Gives parents and guardians information of good schools without charge. Schools needing Teachers and Teachers seeking positions cannot afford to overlook this Agency. Its proprietor, S. S. Woolwine, Principal of the famous Howard school of Nashville for the past ten years, knows the wants of the profession, and can intelligently recommend teachers for every department of instruction in family, school or college. Send stamp for circular.

S. S. WOOLWINE, Proprietor.
je-17-ly 233½ Church St., Nashville, Tenn.

BUCKEYE BELL FOUNDRY.

Bells of Pure Copper and Tin for Churches, Schools, Fire Alarms, Fences, etc. FULLY WARRANTED. Catalogue sent free.

VANDUZEN & TIFT, Cincinnati, O.

VASSAR College for young women at Poughkeepsie, N. Y., during its last scholastic term used to feed the students, 94,158 pounds of fresh meat that cost \$15,547; 86,590 quarts of milk that cost \$4,544; 58,800 pounds of flour, 14,567 pounds of butter; 23,180 pounds of sugar; 2,638 pounds of coffee; 406 pounds of caramels; 5,546 pounds of dried fruits; 1,527 pounds of nuts; 92,000 eggs; 23,860 bananas; 21,100 oranges; 209 bottles of pickles; and 5,917 cans vegetables.

We have tried Dr. Evory's Catarrh remedy, personally, and repeatedly, and find it not only very pleasant, but very effective withall, and so take pleasure in commending it to all. ED.

THE CONQUEST OF THE MOORS

By the Spaniards, not only led to the discovery of America by Christopher Columbus, but it opened the way for its settlement and development. The results growing out of this conquest and discovery were manifold, chief among which was the erection of the Grand Union Hotel opposite the Grand Central Depot, New York City, whose owner, not content with supplying the traveling public with more than 600 elegant rooms at \$1 and upwards per day coupled with the opportunity to save \$3 carriage hire and expense of baggage transfer, has entered the field of authorship and compiled an elegantly illustrated treatise of the above subject, which will be mailed to any address upon the receipt of two 2-cent stamps. Address "S," Grand Union Hotel, New York City, N. Y.

WHY is a baby like wheat? Because it is first cradled, then thrashed and finally becomes the flower of the family.

WHY are ships called she? Because they always keep a man on the lookout.

A young woman has been expelled from a church in New York for saying that her pastor had kissed her four times when she had only been kissed three times. New Yorkers' can't stand wilful exaggeration.

St. Louis & Cairo Short Line R. R.

DUQUOIN ROUTE.

STANDARD GAUGE.

32 The "Old Reliable" and only Standard Gauge Railroad between St. Louis, New Orleans and Memphis.

33 Through Pullman Sleepers to New Orleans via Cairo without change.

34 Trains leave Union Depot at 7:35 a. m., daily, except Sunday; 3:45 p. m., daily, except Sunday; 8:55 p. m., daily, New Orleans Express.

Shortest and quickest line to all Southern points. Through cars—no transfer—steel rail and rock ballast—via Cairo Short Line and Great Jackson Route.

35 This line is the direct connection of the Texas and St. Louis Railroad, the Great Cotton Belt Route, running through the central portion of Arkansas and Texas, being the only direct line for Malden, Mo., New Madrid, Mo., Jonesboro, Clarendon, Camden, Pine Bluff and Texarkana, Ark.; Tyler, Waco, Comstock and Gatesville, Tex. Ticket office, Union Depot and 104 North 4th St., St. Louis.

Deliver freight Second and Poplar, Union Depot and East St. Louis.

B. F. BLUM, G. P. and F. A.

Geo. W. PARKER, Gen. Mgr.

JOHN P. GAY, Contracting Ft. Agt.

F. A. WHITE, Ticket Agt.

JOHN BENTLEY, City Pass. Agt.

ENGRAVING DIRECT FROM PHOTOGRAPH. NO DRAWING REQUIRED. NO HAND WORK NECESSARY. SEND (CHEAP, ARTISTIC) FOR PARTICULARS. CROSSCUP & WEST ENG. CO. 702 CHESTNUT ST. PHILA. PA.

LADIES' FANCY WORK.

New Edition of Book of INSTRUCTIONS and PATTERNS for ARTISTIC Needle work, Kensington Embroidery, etc. Contains a list of fabrics and Materials used in decorative Needle-work. Patterns for Ladies' Hand-bag, Scrap basket; Pin Cushion, Whisk Broom Holder, Splasher, Banner Lamp Shade, Tidy, Map, Oak-leaf Lace, Umbrella Case, Table Scarf, Work-bag, etc. Tells how to make South Kensington, Outline, Persian, Janina, Knot, Button Holes, Point Ruse, Snowflake, Star, Satin, Chain, Wound, Stem, Plush, Rocco, Open-work, Filling, Irish, Hem and Feather Stitches. Gives the terms used in Crochet and Knitted Stitches. Contains Directions for Stamping, and over 200 Illustrations of our Perforated Stamping Patterns, including Illustrations of Wild Roses, Pansies, Golden Rod, Sumac, Coxcomb, Poppies, Snowballs, Daisies, Hops, Barberries, Cactus, Woodbine, Ferns, Corners, Wreaths, Scallops, Braids, Vines, Outlines, etc. We send this book by mail for 18 two-cent stamps. Address J. F. INGALLS, LYNN, MASS. je-17-11

Book and Job Printing.

Send for estimates on

School Printing,

Catalogues and Pamphlet Work, before contracting elsewhere.

G. A. PIERROT & SON,

Fourth and Washington Av., ST. LOUIS

"THE PIANO TEACHER'S IDEAL." The New Musical CURRICULUM

By DR. GEO. F. ROOT.

"A Perfect Instruction Book."

This work is the culmination of long years of labor and observation devoted to its ultimate perfection by one of America's greatest musicians, and in its present form it is beyond all doubt the

BEST WORK OF ITS KIND

ever issued for the purpose intended. Teachers and Students of Music are especially recommended to examine the Curriculum, as it cannot fail to be of invaluable service to them. Price \$3 by mail post-paid. Specimen Pages free.

Published by
JOHN CHURCH & CO.,
CINCINNATI, OHIO.

For Sale by all Book and Music Dealers.

DUNLEVEY'S N. Y. City Purchasing Co., P. O. box 495. We will furnish anything wanted or advertised in the U. S.; full information for stamps. Established 1857. This house is perfectly reliable and trustworthy. 17-7-ly

S. H. WOOD & CO.,

22 Chamber of Commerce, Chicago, Ill.

GRAIN AND STOCK BROKERS.

24½ Hennepin Ave., Minneapolis, Minn.
Chamber of Commerce, St. Paul, Minn.

Buy and sell Stocks, Grain and Provisions in large or small amounts; reasonable margins and lowest commissions. Mr. S. H. Wood, of this firm, has the reputation of being the largest and most successful operator in the Northwest, and to his advice the firm and their customers are largely indebted for their success. 36 Correspondence solicited. Send for quotations. 171-k-j

ORNAMENTAL

METALLIC BINDING STRIPS

To protect the edges of floor oil cloths, etc. Strips rolled out of bright and stiff brass with holes already punched and nice oval-head brass tacks furnished to put down, sent post-paid for 3 cents a yard. Strips rolled out of plated steel, with tacks to match, sent post-paid for 6 cents a yard. (This is a very durable strip.)

AN AGENT wanted in every county in the United States to furnish dealers, sub-agents, etc. Samples and full particulars free. Address

CHAS. E. MARSHALL,

17j tf

Lockport, N. Y.

100 DOLLARS A MONTH TO CANVASS AND TAKE ORDERS FOR HOWE'S PATENT ADJUSTABLE SLIDING WINDOW SCREENS. Best selling goods ever offered to Agents. Terms and outfit FREE. Orrin P. Howe & Co., Augusta, Me. 17-7-18

ESTEY & CAMP

PIANOS
For Cash
PIANOS
Easy Payments.
PIANOS
For Rent.
PIANOS
Perfectly Tuned.



DECKER BROS.
CHICKERING.
HAINES BROS.
MATHUSHEK
PIANOS.

Estey and Camp & Co., Organs.

303 North Fifth Street, ST. LOUIS.
O. 16-1017.

PRIZES FOR ARITHMETIC

\$600 00.

The publishers of *The School Supplement* purpose issuing a new book on the subject of Arithmetic to offer as a premium with their paper. Rather than pay an individual author a sum of money to prepare such a book as they require, the publishers have divided the sum, Six Hundred Dollars, which they have decided to offer, into One Hundred and Twenty Prizes, arranged in eight groups of \$75 each. To correspond with these eight groups of prizes, they have divided the whole subject of Arithmetic into the following eight departments:

1. Addition, Subtraction, Multiplication, Division.
2. Factors, Multiples, Fractions, Decimals.
3. Denominate Numbers.
4. Practical Measurements.
5. Percentage, Trade Discount Profit and Loss, Commission and Brokerage.
6. Interest, Partial Payments, True and Bank Discount, Stocks.
7. Insurance, Taxes, Exchange, Proportion, Partnership.
8. Miscellaneous Practical Exercises and Problems.

Each group of prizes the publishers have subdivided as follows: Five first prizes of \$10 each; five second prizes of \$5 each; and five third prizes of \$3 each. All Teachers and Students may compete for these prizes upon the following conditions:

Each must send to the publishers, as early as possible, a set of ten examples in Arithmetic based upon the work included in some one of the eight departments already named. The correct answers (not solutions) to the ten examples must also be given. The examples need not necessarily cover the whole work of the department. Each competitor may enter for prizes in as many departments as he chooses, but no one competitor will be awarded prizes in more than five departments.

The Prizes will be awarded for the fifteen best sets in each department. The arbitrators will take into consideration the originality and practical character of the examples, and their general adaptation to public, grammar, and high school work.

The Three Hundred sets of examples which the arbitrators consider the best will be published in book form. Each set will be printed complete, and the name of the compiler will be inserted with it. Together with the Three Thousand Examples secured in this way, the book will contain an entirely new and novel treatment of the whole subject of Arithmetic. The printing and binding will be the best that modern workmanship can turn out.

Every person who sends a set or sets of examples must send therewith \$1 as his or her subscription to *The School Supplement* for one year. A copy of the Arithmetic will be mailed FREE to every subscriber on the second day of February, 1885. The latest date for receiving sets of examples in departments 1, 2, 3, 4 will be January 5th, and in departments 5, 6, 7 and 8, the latest date will be January 10th, 1885. The One Hundred and Twenty Prizes will be mailed by P. O. Order or Bank Draft to the winners on the second day of February, 1885. The complete results of the competition will be published in the Supplement. Any further explanation or information necessary will be sent cheerfully upon application.

The School Supplement is, without any exception, the best school paper published. Though its publication was commenced less than a year ago, its fame has already spread from California to Newfoundland, and from British Columbia to Florida. Its subscribers represent every State and Province. The Supplement is an Educational Journal on an entirely new plan. It is profusely illustrated, and contains lessons in all the school subjects. The current numbers contain biographies of noted authors and statesmen, with large, beautifully engraved portraits; short stories for the school-room; interesting sketches; maps and illustrations; readings and recitations; lessons in practical arithmetic and grammar; hundreds of sentences for correction; illustrated lessons in astronomy, standard time, correspondence, mensuration and railroad geography; anecdotes of authors, practical exercises for primary pupils; prize competitions for pupils work; and numerous miscellaneous articles. Sample copies will be mailed to those who have not seen the paper, for EIGHT CENTS in stamps.

SPECIAL OFFER.

The publishers will continue to mail a new book FREE to all their subscribers on the first day of February of each year. A few hundred copies of their 1884 book still remain on hand. It is an Examination Manual, and it contains over 2,000 questions and exercises in all the common and high school branches. This is a very valuable book, many thousand copies having been disposed of during the year. It contains 175 pages, beautifully printed and bound. A copy will be mailed FREE to every new subscriber until the stock is exhausted. Those, then, who subscribe at once, whether competing for the Arithmetic Prizes or not, will receive one book by return mail, one book on the second day of February, 1885, and *The School Supplement* for one year—all for ONE DOLLAR. Please enclose eight cents in stamps with your one dollar, to pay the postage of the Examination Manual. Mail all letters to either one of the following addresses:

EATON, GIBSON & CO., Educational Publishers, Buffalo, New York,
or EATON, GIBSON & CO., Educational Publishers, Toronto, Canada.

The Supplement and premium books are mailed from both places. All letters are answered promptly. Mention this paper.

Only Fifteen Cents for Three French Dolls WITH AN ELEGANT WARDROBE OF 32 PIECES.



Consisting of Reception Dresses, Evening Dresses, Street Costumes, Morning Dresses, Cloaks, Hats and Bonnets, Hand Satchels, Sun Umbrellas, Music Portfolios, Overcoats, Sailor Suits, Military Suits and Drums, Street Jackets and Dress Suits, Watering Place Suits, Traveling Costumes, &c. These dresses and suits in this elegant wardrobe represent nine different colors, and they are lovely beyond description, several of them being from designs by Worth, of Paris. There is one little boy and two girl dolls in each set, with pretty faces and life-like beautiful features, and their wardrobe being so extensive that it takes hours to dress and undress them in their different suits. Every child, and in fact every mother that has seen them go into ecstasies over them. Children will get more real enjoyment out of a set of these French Dolls than out of articles that cost \$10. Every person that buys them sends immediately for more. A lady writes us that her little boy and girl played for five hours with a set of these French dolls, and they felt very bad indeed to think that they must stop and set their supper, and if mothers only knew how much amusement there is in these dolls they would not only give 15 cents but 50 cents for them rather than not to have them. A complete set, consisting of three dolls with their wardrobe of 32 pieces by mail, postpaid, 15 cents. Two sets, 6 dolls, 64 pieces for 35c. Ten sets for \$1. If you send for one or two sets we will send our Secret Method and Full Directions how you can make more than one hundred dollars a month out of these dolls. This is an opportunity too valuable for you to lose.

17-12-15-1

Address FRANK O. WENOSKEY, Providence, R. I.



WHAT CAN Cuticura DO FOR ME?
EVERYTHING that is purifying, beautifying, and curative for the Skin, Scalp and Blood, the CUTICURA REMEDIES will do. Nothing in medicine so agreeable, so speedy, and so wholesome. Guaranteed absolutely pure by the analytical chemists of the State of Massachusetts, whose certificates accompany every package. For cleansing the Skin and Scalp of Birth Humors, for allaying Itching, Burning and Inflammation, for curing the first symptoms of Eczema, Psoriasis, Milk Crust, Scall Head, Scrofula, and other inherited skin and blood diseases, CUTICURA, the great Skin Cure, and CUTICURA SOAP, an exquisite Skin Beautifier, externally, and CUTICURA RESOLVENT, the new Blood Purifier, internally, are infallible. Sold everywhere. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, 50c. POTTER DRUG AND CHEMICAL CO., Boston.
Send for "How to Cure Skin Diseases."

Opium and Whisky Habits cured at home without pain. Book of particulars sent free.
B. M. WOOLLEY, M. D.,
Atlanta Ga.

JOHNSON'S Family Atlas of the World

Is used in thousands of schools.
Acknowledged to be the best.
New edition just issued.
Fully revised to date.
Two medals and a decoration.
Over 180,000 sold to date.
We want more men in each State.

Address
A. J. JOHNSON & CO.,
11 GREAT JONES, ST., NEW YORK.
17-12-15

COPYING AND ENLARGING PICTURES

IN INDIA INK, WATER COLORS AND CHAYON. The largest and most complete house in the West. Nine Solar Cameras in use. Work delivered promptly. THE UNITED STATES PHOTO-COPYING CO., Cor. State and Quincy Sts., Chicago, Ill.
J. POWELL, Proprietor.

17-C-18-B

Popular Songs ONE CENT Each

- | | | |
|-------------------------------------|-----------------------------------------|----------------------------------------|
| 1 Baby Mine. | 113 Old Man's Drunk Again. | 343 Sweet Charming Belle. |
| 2 Ella Mae. | 131 Kiss Me, Mother, Kiss Your Darling. | 345 Yellow Rose of Texas. |
| 3 Old Cabin Home. | 134 Old Log Cabin on the Hill. | 371 Sweet Belle Malone. |
| 4 Old Black Joe. | 136 Coming Thro' the Rye. | 379 You'll Miss Me When I'm Gone. |
| 5 Home, Sweet Home. | 151 Must We Then Meet as Strangers. | 387 Razzle in the Air. |
| 6 See that my grave kept Green. | | 389 Carrie Lee. |
| 7 Nancy Lee. | | 399 Don't Keep Away from the Girls. |
| 8 Old Folks at Home. | 146 Mollie Darling. | 429 A Violet from Mother's Grave. |
| 9 Sweet By-and-By. | 147 My Daughter Julia. | 447 Mary's Gone with a Oon. |
| 10 Sweet Emma. | 177 Sweet Evangeline. | 455 Joe Brown. |
| 11 You'll Remember Me. | 186 Don't Be Angry, Darling. | 460 Over the Garden Wall. |
| 12 When I Saw Sweet Nellie Home. | 189 Darling Minnie Lee. | 466 Mother Says I Mustn't. |
| 13 Poor Old Slave. | 234 Come, Birdie, Come. | 523 Only to See Her Face Again. |
| 14 My Old Kentucky Home. | 243 Farmer's Daughter. | 533 Pecks-a-boo. |
| 15 Gypsy's Warning. | 245 O dem Golden Slippers. | 538 I'm Dying for Some One to Love Me. |
| 16 Kitty Wells. | 255 Little Brown Jug. | 555 When the Robins Nest Again. |
| 17 Take Me Back to Home and Mother. | 293 Hush, my Darling, Do Not Weep. | 566 I'll Wait, My Love. |
| | 267 Little Nell of Narragansett Bay. | |
- We will send ten of the above songs, YOUR OWN SELECTION for TEN CENTS, 25 for 15 cts., or the whole lot, \$2.00, for \$2.00. VALUABLE Catalogue of 600 other songs, Books, Cards, Watches, BRUSH LOADING Guns, Revolvers, Trick Games, and ADAM'S GOUTS SENT Free with it or more songs. Address: HOME MUSIC CO., PROVIDENCE, R. I.

ATTENTION ALL!

We want one or two agents, male or female, in each county in the U. S. and Canada, on stated weekly salary, to distribute Circulars, Pamphlets, etc. No previous business experience necessary. No time required. If you can't spare time, you can do our work. You are not required to speak one word unless you feel to do so. A permanent situation for reliable persons. For full particulars address, inclosing 2c. stamp, A. D. COLLINS, Northampton, Mass. No Postals answered.

— FOR —

Choirs, Conventions, Singing Classes, and the Higher Schools.

No Better Books have Appeared for Years than the following:

Choral Worship. L. O. EMERSON. Church Music Book of 320 pages, 100 pages Elements, with a capital collection of Sacred and Secular Music. 75 pages of the best Hymn Tunes. 110 pages of Anthems, and 30 pages of miscellaneous Concert Music. \$1. Per doz. \$9.

The Model Singer. W. O. PERKINS and D. B. TOWNER. A book for SINGING CLASSES. 192 pages. 124 Graded Exercises, 57 Glee and Part Songs, 29 Hymn Tunes, 18 Anthems and 4 Chants. Abundant and useful material for the Singing-School Teacher. 60 cents. Per doz. \$6.

Song Greeting. L. O. EMERSON. A new and extra fine song book for the "higher schools," meaning by that, Colleges, Technological and other special schools, Academies, Institutes, Seminaries, High and Normal Schools. 160 large octavo pages. 88 harmonized songs of the highest order, both in words and music, classical in beauty and interesting to every one. Also exercises and self-glosses for voice culture. 60 cents. Per doz. \$6.

Any book mailed for the retail price.

OLIVER DITSON & CO., Boston.
C. H. DITSON & Co., Broadway, New York.

100 Fine Printed Envelopes, white or assorted colors, with name, business and address on all for 50c., 50 for 25c. Cards and Letterheads at same price. Special designs for teachers.
C. E. DUPUY, Syracuse, N. Y.

CATALOGUES ON APPLICATION.

- Part I.—Mathematical Instruments, 160 pp.
Part II.—Optical Instruments and Microscopes, 144 pp.
Part III.—Magic Lanterns and slides, 112 pp.
Part IV.—Philosophical and Chemical Apparatus, 108 pp.
JAS. W. QUINN & CO.,
94 Chestnut St., Philadelphia.



TEACHERS

Can double their income by selling either of the two following sterling books:
The Pioneer History of America. Royal Octavo. 1032 pages. 100 Magnificent Illustrations.
People's Farm and Stock Cyclopedia. Imperial Octavo. 1224 pages. 400 Elegant Engravings.
For Terms, Descriptive Circulars, and Particulars, address JONES BROS. & CO., Cincinnati, Chicago, St. Louis.



The most popular Weekly newspaper devoted to science, mechanics, engineering, discoveries, inventions and patents ever published. Every number illustrated with splendid engravings. This publication, furnishes a most valuable encyclopedia of information which no person should be without. The popularity of the SCIENTIFIC AMERICAN is such that its circulation nearly equals that of all other papers of its class combined. Price, \$3.20 a year. Discount to Clubs. Sold by all newspapers. MUNN & CO., Publishers, No. 36 Broadway, N. Y.

PATENTS. Munn & Co. have also had Thirty-Seven years' practice before the Patent Office, and have prepared more than One Hundred Thousand applications for patents in the United States and foreign countries. Caveats, Trade-Marks, Copyrights, Assignments and all other papers for securing to inventors their rights in the United States, Canada, England, France, Germany and other foreign countries, prepared at short notice and on reasonable terms. Information as to obtaining patents cheerfully given without charge. Hand-books of information sent free. Patents obtained through Munn & Co. are noticed in the Scientific American free. The advantages of such notice is well understood by all persons who wish to dispose of their patents. Address MUNN & CO., Office SCIENTIFIC AMERICAN, 36 Broadway, New York.

MAGIC LANTERN ELECTRIC LIGHT Steady, fixed-focus, Iridium Arc Lamp. Also **LIME LIGHT MADE EASY!** Cheapest, Safest, Best. Send for recent circular. MAGIC LANTERNS AND FINE SLIDES a Specialty. L. J. MARRY, 1240 Chestnut St., Phila.
17-12-15-2

CARD COLLECTOR'S

HEADQUARTERS CHROMOCARDS HEAD-UP PICTURES, and ART NOVELTIES. The latest styles embrace illuminated, Gilt, Embossed, and Imported Cards. Six sample sets, comprising 30 elegant cards (no two alike), sent for ten cts. stamps. Catalogues free. Address: J. W. TAYLOR & SON, Publishers, P. O. Box 5. (Cut this out.) Rochester, N. Y.